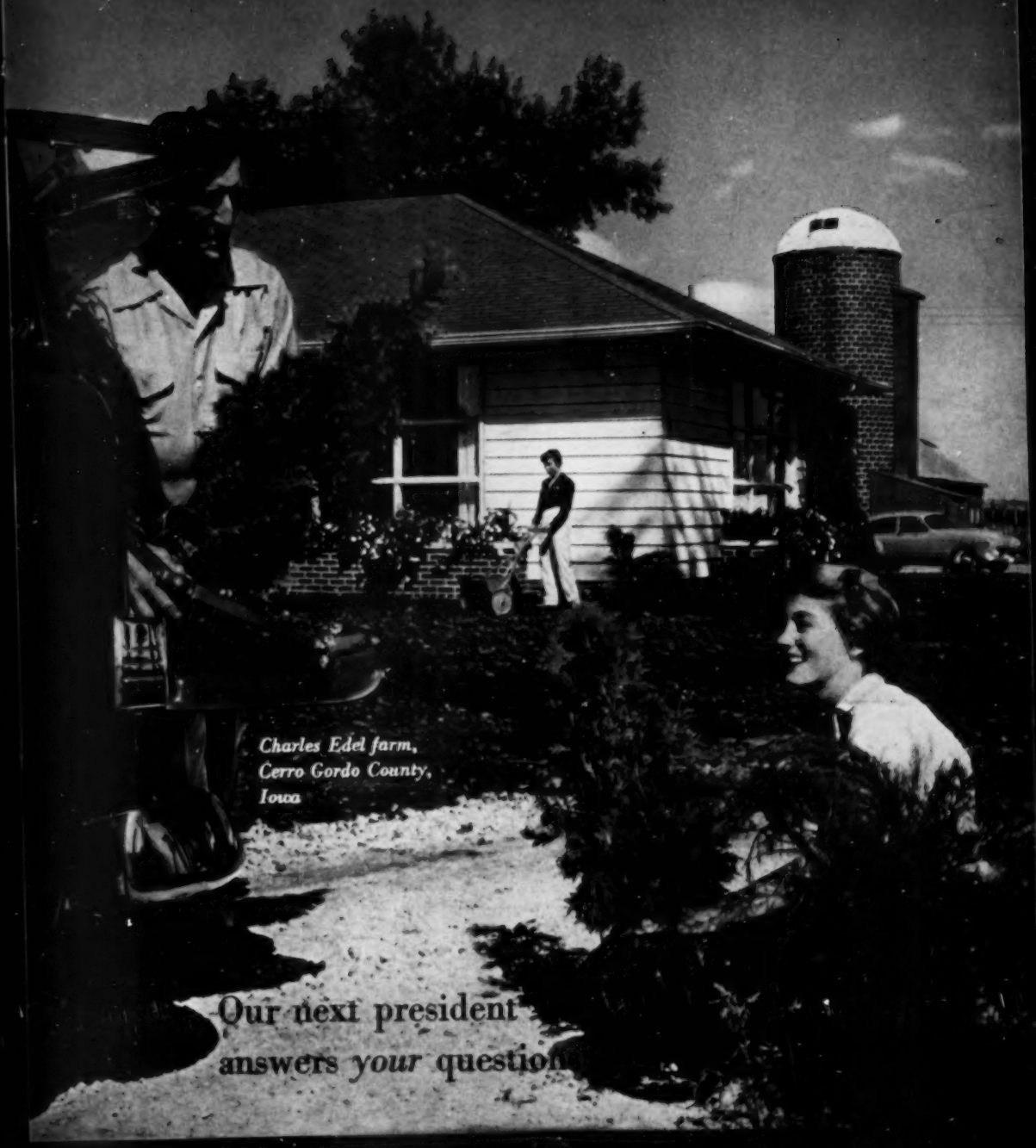
Successful Farming

October 1952 · 25 cents



Charles Edel farm, Cerro Gordo County, Iowa

Our next president answers *your* questions

AMERICAN-Standard

BATHROOMS

New! A smart combination of lavatory plus dressing table plus roomy cabinet! It's called the Dresslyn. Matching it are the Master Pembroke Bath and Master One-Piece Water Closet. Many other styles and colors to choose from.

Make your old bathroom look like this!

Imagine this bathroom in your home! You will love its sparkling beauty. And a high style bathroom like this keeps its new-as-tomorrow look for years to come. Best of all, the room-transforming American-Standard fixtures can be yours on the most *liberal of payment terms.* To learn how little it costs . . . how easy it is to re-do your old bathroom or to add an extra bathroom or powder room, see your plumbing retailer. He's listed in the yellow pages of your phone book under "Plumbing Fixtures" or "Plumbers' Supplies." He will give you an estimate in advance.

FREE . . . NEW HOME BOOK packed with color illustrations of dream bathrooms and powder rooms. Brings you new ideas for kitchens, too. Explains easy payment terms. Mail handy coupon today.

PLEASE PRINT

American Radiator & Standard Sanitary Corp.
Dept. 85-102, Pittsburgh 30, Pa.

Please send me your NEW HOME BOOK.

I am modernizing _____ Building a new home _____

Name _____

Street _____

City _____

County _____ State _____

If you live in Canada send to: Standard Sanitary & Dominion Radiator, Ltd., Box 39, Station D, Toronto

Serving home and industry: AMERICAN STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILERS • ROSS HEATER • TONAWANDA IRON

You know best
WHOSE WORD COUNTS

It's only natural for each manufacturer to claim that his tractor tire gives more traction, or cleans better, or lasts longer.

But the question is—who's right? Whose word really counts?

As a farmer, you know whose word counts most. It's the word of farmers like yourself—farmers who have tried *all* makes of tractor tires—farmers with years of firsthand, day-in, day-out experience in the field.

And thousands of farmers across the nation—farmers who work their own acres just as you do—vote Goodyear's time-proved Super-Sure-Grips their *First Choice* in tractor tires.

In survey after survey, year after year, they name Goodyears first by an overwhelming margin. *There is no close second.*

Yes, *farmers* say Goodyears pull where other tires won't. *Farmers* say Goodyears clean better and last longer.

You can count on them to give you the best advice on tractor tires.

FIRST in Traction • FIRST in Long Wear
FIRST in Popularity

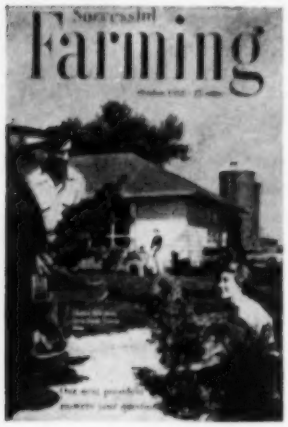
Super-Sure-Grip—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

GOODYEAR

Super-Sure-Grip Tractor Tires

We think you'll like "THE GREATEST STORY EVER TOLD"—Every Sunday—ABC Network

This month



Photograph: Photography, Inc.

If you chance along on U.S. Highway 65 as it runs through northern Iowa, you will come upon the charming farm home on this month's *Successful Farming* cover. Just south of Mason City, Iowa, it nestles back into a picture setting of towering oaks and elms. And if you stop in—as we did—you will meet the Charles Edels, who own and operate the 150-acre farm on which this house is built.

A new house marks a pretty important milestone in any family's life, and the Edels are no exception. For many years—while their big family of 10 children was growing up—they all planned and hoped together for the day when a new, Modern house would be possible. The wait was long. "But my, it was worth it," says Mrs. Edel. "For our house exactly suits our way of living. It is everything we've wanted, everything we've waited for."

Since 17-year-old Barbara and 14-year-old Karen are the only children still at home, the Edels with their architect, Bob Miller, designed it to fit the needs of the now-small family. Two bedrooms, a combination living-dining area, kitchen, and utility room make up the house. And believe us, every inch is packed with comfort.

Through the broad floor-to-ceiling windows in the dining-living room you can look out across the sweep of farmland to the south and west. The center windows open like oversized louvers to give full ventilation in warm weather. And just outside are the long, low planter boxes filled with colorful geraniums and petunias in summer, pine boughs in the winter. These add a cheerful touch inside as well as out.

Landscaping the yard was the family's final venture. And in the photograph on the cover you see Mr. Edel and daughter, Karen, unloading an armful of small pine, while Barbara, in the background, seeds the start of a lovely lawn.

Successful
Farming
The Dairy Farmer

THE MAGAZINE OF FARM BUSINESS AND FARM HOMES

October, 1952 Vol. 50, No. 10

Management and Business

Farm outlook ... 6
Friend to friend ... 8
The farmer's Washington ... 16
Come see for yourself ... 20
Farming's best half century ... 33
Which man? ... 36
They sell eggs for what they're worth ... 38
Good management—key to success with substitute sow's milk ... 48
Farmers needed for defense against air attack ... 80
The great land rush of 1952 ... 92

Herds, Flocks, Crops

Is your cattle feeding this easy? ... 38
Look what legumes can do for you ... 40
What you should know about livestock minerals ... 46
Makes $4.40 an hour grading and candling eggs ... 58
Dairy ... 122
Watch hogs for vesicular exanthema ... 131
Livestock ... 140
Poultry pointers ... 142
Turkeys and dairying ... 144
Veterinary ... 164

Homemaking

What's new in homemaking ... 24
Latest "know-how" in foods ... 26
All around the house ... 28
How to mix pattern and plain ... 42
Make your cooking easier ... 44
Chuck cuts ... 50
Tips for the cook ... 52
Ten hearty soups ... 55
How to freeze beef ... 66
"We wanted it cheerful" ... 74
What to know about knives ... 88
For school and everywhere . . . a skirt and sweater ... 132
Home planning helps ... 135
Are you going to buy a blanket? ... 154
Knitting helps ... 157
Meat—for a hearty beginning ... 166

Farm Building and Machinery

What's new in farming ... 10
Gates, gates, gates ... 34
Portable pens for calves ... 68
How to disinfect barns ... 70
Successful shortcuts ... 124
All around the farm ... 170

Family Life and Fun

Books ... 12
What was new in farming 50 years ago ... 30
Get ready for Christmas! ... 65
"Bewitching" idea for Halloween ... 78
Attention, teens ... 100
Laughing at life ... 104
The farm quizbox ... 110
The playhouse ... 118
How to cut down on accidents ... 120
Let us plan our own fun! ... 128
"I lived with the Communists" ... 136

E. T. Meredith, Founder, 1876-1928
Fred Bohen, President
E. T. Meredith, Jr., Vice-President and General Manager
Lester H. Mugge, Vice-President and Director of Circulation
Edwin L. Sullivan, Vice-President and Director of Advertising

Kirk Fox, Editor — Jim Roe, Managing Editor
Dick Hanson, Nancy Carpenter, Betty Fisk, Associate Editors;
Vernon Schneider, George D. Johnson, S. S. DeForest, Betty Carlson,
Elizabeth Page, Carol Towers, Sue Menne,
Maurine Harris, Claire Miller, Helen Stark (New York), Assistant Editors.
Edgar M. Young, Production Editor

Bert Dieter, Art Director — Earl K. Larson, Art Editor
Frank Mathews, Assistant
C. W. Howe, Manager of Meredith Farms

Successful Farming guarantees money back or replacement if you buy any article of merchandise that is not as advertised therein.

Subscription Correspondence: Any questions concerning subscriptions can be answered more quickly if accompanied by an address label clipped from a recent copy. **Rates:** New and renewal subscriptions, one year $1.50 in the United States and possessions, Canada, and Pan-American countries. Other countries $2 per year. Any time you are not satisfied, your money will be cheerfully refunded. For continuous service, a renewal must reach us at least 30 days before expiration of the old subscription. **Change of Address:** Five weeks' notice is required. Please report any change of address to *Successful Farming*, Des Moines 3, Iowa, rather than through your local post office. Send OLD address as well as the NEW, enclosing an address label clipped from the cover of a recent copy. Entered as second-class matter October, 1902, at the post office in Des Moines, Iowa, under act of Congress, March 3, 1879.

Copyright 1952, by Meredith Publishing Company in the United States and in all countries participating in the International Copyright Convention. Titles *Successful Farming* and *The Dairy Farmer* registered in U. S. Patent Office.

Published monthly by Meredith Publishing Company, 1716 Locust St., Des Moines 3, Iowa, U.S.A.

"SOMEDAY THIS FARM WILL ALL BE YOURS..."

(All—or just what's left after taxes?)

"There's a good life and a good living to be had here, son—a comfortable home, plenty of good land and the equipment to work it with. And some day it will all be yours . . ." That was the father's hope.

But shortly after he died, his family had only a part of the farm he had left them. Some of it had to be sold at a sacrifice. He had overlooked estate taxes.

Today, this is a particularly dangerous (and all-too-common) oversight. For as a farm's value increases, tax *rates* increase—frequently by so much that it's not at all unusual for estate taxes, inheritance taxes, administration and probate costs to eat up 20 to 30 percent of a farm's net value! What's more, these costs must be paid *in cash*, and within a short time after the owner's death. And when cash must be raised quickly . . .

But your family need not face this problem if you take these three simple steps now:

1. Determine how much your farm is actually worth *at today's high prices.*
2. Estimate the amount of cash that would be needed to meet all the expenses of settling your estate.
3. Make sure your heirs will have this much cash on hand, ready when they need it most.

The practical way to give your wife and children this protection is to make sure you own enough life insurance. Then you can guarantee your heirs the ready money they'll need to settle your estate quickly and with less trouble and worry. The very event that creates the tax bill creates the money to pay it.

Above all, it will help you make certain that they will receive all the property you wish them to have.

The New York Life agent serving your county will be glad to show you, without obligation, exactly how life insurance can be used to protect your estate. Get in touch with him today. If you don't know his name, just write to the Home Office at the address below.

THE NEW YORK LIFE AGENT
IN YOUR COUNTY
IS A GOOD MAN TO KNOW

NEW YORK LIFE
INSURANCE COMPANY

51 Madison Avenue, New York 10, N. Y.

New York Life, a mutual company, pays dividends to policyholders only. It is one of the strongest legal reserve companies in the world.

Farm Outlook

Latest information on conditions, production, markets, and income prospects

Balance wheels

Consumers are reported to be spending more, saving less. Consumers are buying more food and clothing, but less of the durable goods.

Defense production continues to be the principal economic balance wheel keeping employment and consumer buying power high. Rate of national expenditures for security has been stretched further, was scheduled to reach a peak plateau of $60 to $65 billion annually by the end of this year. Now, expenditures are expected to reach that rate late in 1953.

Stretch-out lengthens good marketing period for your farm products. For most, the prospect is for continued strong demand and relatively stable prices.

Farm production off

July drouth took heavy toll of farm production—principally outside the Cornbelt. The corn crop slid off 230 million bushels, oats nearly 100 million. Sorghum grain will make less than half of last year's 159 million bushels. Hay also suffered some loss. Drouth dried pastures, cut milk flow to the smallest volume in 12 years.

Loss of feed means that prices won't be as much below 1951 levels as was indicated earlier. Cash corn growers should do well this year with heavy demand for feed coming from the South and East. Iowa corn crop was indicated at a whopping 648 million bushels—176 million more than last year.

Still more wheat

Wheat—particularly spring wheat—improved while other crops declined. Upping of total crop raises 1952-53 supply to 1.6 billion bushels against last year's 1.4. Increase will add 200 million or more to year-end carryover. Of this year's crop, winter wheat is 300 million bushels more than last year; spring wheat 100 million less.

Wheat will sell higher this fall and winter. But average for the marketing year will be 5 to 7 cents a bushel below support. Big quantities are going into C.C.C. loan. By year's end, C.C.C. may own as much as 350 million bushels of wheat.

Spring pigs

Probable increase in 1953 spring pig crop in the Cornbelt may be offset by reduction in drouth areas. Hog-corn price ratios have improved, but controlling influence will be feed supply.

Meanwhile, B.A.E. says hog slaughter the remainder of this year will continue smaller than in corresponding months of 1951. This should help prices. Total feed supply may be no more than in 1951 but located differently—up in Cornbelt, down outside.

Hog grades

Though small, a beginning has been made in the direction of encouraging the buying of hogs by grade instead of by weight. The U.S.D.A. has issued new grade standards for slaughter barrows and gilts and for barrow and gilt carcasses. The new grades are Choice Nos. 1, 2, and 3, Medium, and Cull.

The announcement reported tests show that the meat and lard value of Choice No. 1 grade carcasses is often 10 to 15 percent more than that of Choice No. 3 grade of similar weight. Use of the new grades is voluntary.

Cattle slaughter up

Cattle slaughter has been a little larger this year. This is the beginning of a general uptrend that is likely to continue for several years, says B.A.E. Dry ranges and pastures forced some cattle to market this summer, and a stepped-up movement of grass cattle was considered a possibility.

Good demand for feeder cattle also is in the picture. The summer inventory of cattle on feed in the Cornbelt was the largest for the postwar years. About 245,000 head more than in 1951, and 50,000 more than in 1950. Largest increase was in the eastern Cornbelt.

More slaughter sheep

B.A.E. says some seasonal price decline is expected in slaughter sheep and lambs as marketings pick up this fall. The 1952 lamb crop was 2 percent larger than the 1951 crop. The native states reported 10 percent more lambs than last year, but the Western crop was 2 percent smaller than a year ago.

Milk production down

Production of milk has been on a downward trend since last fall. January through July production was nearly a billion pounds less than in the same period last year.

Reduction has been reflected in higher prices, because consumption of fluid milk has been running as large as a year earlier, with less milk going to by-product use.

Milk flow the remainder of this year is also likely to be below a year earlier. Cow numbers and milk production are not likely to increase until other farm enterprises become relatively less satisfying.

Broilers up again

Broiler production began the year a-booming, fell off as prices dropped, now seems to be on the uptrend again.

This is the usual pattern of change in this quick-turnover industry. But the long-time trend for broilers is definitely upward.

Egg lay up, too

Drouth cut the egg lay in June and July, but total for first seven months was over a billion eggs more than in like period last year. Lots of eggs were put in cold storage last spring. This storage of eggs has tempered the rise in prices.

Egg prices got up to 88 percent of parity in mid-July—the best performance in some time. P.M.A. is now distributing the 221,000 cases of eggs bought last spring for school lunches. Egg prices are expected to rise seasonally this fall, but not enough to require O.P.S. ceilings.

Marketing-labor costs up

The 4.6 million workers engaged in the processing, wholesaling, and retailing of farm food products got more than 13 billion dollars last year. This was about half the marketing charges paid by consumers. It was 42 percent more than the same number of workers received at the end of World War II. It was several billions of dollars more than farmers netted last year for producing the farm food products in the first place. **END**

More Weight on Broilers ...and on Hogs and Cattle, too!

Read how Aluminum Roofing helps turn Feed into Meat, Eggs...or Milk!

Mr. Ben Parks and Miss Kathleen McClure are co-owners of Quality Hatcheries, Inc., Winder, Georgia. They have 10,000 birds in their 44' x 160' broiler house. Roofed with Reynolds *Lifetime* Aluminum 5-V Crimp, this house has gas heaters, automatic water and automatic feeders. Says Mr. Parks:

"I have raised broilers in buildings covered with other materials, and I know it is much cooler under aluminum in our Georgia summers. I know this is why our broilers gain faster, and command a higher market price sooner. Incidentally, my winter fuel bills are substantially lower in this house. Aluminum makes the difference in dollars and cents!"

Dairy farmers, too, are finding a big dollar-difference in milk production with aluminum roofing and siding to take off summer heat. The same goes for weight gains in hogs and beef cattle. Every warm-blooded animal benefits from the cooling effect of aluminum in summer.

There's a big dollar-difference in maintenance, too—because rustproof aluminum needs no painting, lasts practically forever. Make your farm buildings *better tools*, with aluminum. Make 'em *work*... make 'em *pay!*

Take time for PROFIT PLANNING...with rustproof, heat-reflective

REYNOLDS *Lifetime* ALUMINUM ROOFING and SIDING

for Homes and All Farm Buildings!
REYNOLDS ALUMINUM REFLECTIVE INSULATION
High insulation efficiency without bulk. Perfect vapor barrier. Aluminum foil on one or both sides of kraft paper. Quickly put up.

It pays to *take time* for your building plans. Start now, and tell your dealer that you'll be wanting top-quality Reynolds *Lifetime* Aluminum Roofing and Siding. Your dealer's supply is currently limited by military needs for aluminum... but if you ask him now and give him time, you may come out just right for your construction schedule. Ask him now and keep asking... *patience* pays off in profits! Mail the coupon. Write for literature. **Reynolds Metals Company,** Building Products Division, Louisville 1, Kentucky.

CORRUGATED
5-V CRIMP
WEATHERBOARD

FARM INSTITUTE

REYNOLDS FARM INSTITUTE OFFERS PLANS FOR LOW-COST FARM BUILDINGS...

Pole-frame construction, low-cost, labor-saving. Prices include complete working drawings, instructions, list of materials.

Also, *FREE* "ADAPTOR PLAN" showing how to use aluminum with any standard building plan.

Check coupon.→

(1) Barn, $5.

(2) Machinery Center, $5

(3) Livestock Shed, $2.

(4) Hog House, $3.

REYNOLDS FARM INSTITUTE SF-6
Box 1800, Louisville 1, Kentucky

Please send me FREE ☐ "Adaptor Plan" ☐ More information on buildings numbered (1), (2), (3), (4).

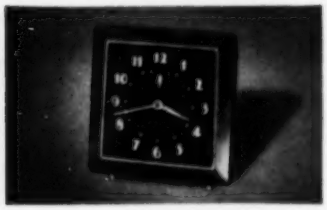
NAME _____

STREET ADDRESS _____

CITY _____ STATE _____

MY DEALER'S NAME _____

SPUR Spring-Driven Alarm. Luminous, day-and-night reading feature at low price. Steady bell alarm. Base tilts clock at graceful, easy-reading angle. $3.60.



faithful hands for your farm

...by Westclox

BIG BEN Spring-Driven Alarm. World-famous! He has a tick you can hear and a deep, intermittent "fire alarm" gong. $5.55. With luminous dial, he's $6.60.

BABY BEN Spring-Driven Alarm. Popular "little brother" of Big Ben. Has a quiet tick; a steady call, adjustable to loud or soft. $5.55. With luminous dial, $6.60.

Prices quoted do not include tax and are subject to change

WESTCLOX

Made by the Makers of Big Ben

PRODUCTS OF GT GENERAL TIME CORPORATION

Friend to Friend

Farewell to the horse

In 1870 there were 20,774 working oxen on Kansas farms. They gave way to the faster horse and no one grieved much over the change. And now horses have given way to tractors, but only after a great tug at the heartstrings. If you doubt it, note the numbers of farms on which there is still a team of work horses running in the pasture. They show no harness marks—in fact, few farms could assemble a complete set of harness.

Twilight of the breeds?

A quite remarkable herd of dairy cows produced by systematic crossing of four breeds came to my attention this summer. As soon as possible, I hope to give you full details. In the ranch country, a short time later, I was impressed by the number of herds of crossbred beef cattle. Are we entering the twilight of purebred livestock for commercial herds? Must purebreds, as we have always known them, be forever retained to make a new start after crossbreeding has exhausted the advantages of hybrid vigor? Do we need a new definition of "purebreds" that permits admission of third-generation crosses to herd books upon proof of fitness?

A visit to any packing-house killing pen is enough to convince you that hog raisers are using crossbred vigor for all it is worth. Already the hog breeder has come forth with new breeds resulting from systematic crossing of old ones. Does this mean new breeds of livestock will replace old ones as soon as better combinations of genes have been developed?

Plant breeding has reached a point where old varieties promptly give way to new ones possessing real advantages. Who would cling to Reid's Yellow Dent corn or Yellow Champion oats these days? Both were big improvements over anything available at the time they were first introduced. Most older farmers can remember the marked improvement in herds and flocks that followed crossing of mixed herds of uncertain origin with purebred sires. But was the improvement a result of hybrid vigor or a special breed?

I am ready to pay profound respect to the men who brought our European breeds to superiority from a combination of breeds that existed at that time and are now forgotten. I am ready to recognize any man who develops a better breed (regardless of shape and color) than the excellent ones we know today. There is nothing sacred that I can see about a breed. However, the cost of development must always be great. Unless there is assurance that one will be protected while making a profit from selling the new breed, it will not be forthcoming except from state or federal agencies. This in turn takes away the advantages enjoyed by those going to great expense developing the older breeds.

A delicate problem in the improvement of our livestock exists. Its solution must be faced squarely with future needs of our population foremost in our thinking. There will be new breeds as a step in systematic improvement. They may come and go in the future more often than in the last 75 years.

Bloat danger

Prevention and treatment are covered by hundreds of home and professional measures, but in seasons of lush forage animals bloat and die in frightening numbers. This year Cornbelt farmers have had so many heavy losses that some have used extreme measures such as spraying pastures to kill all legumes. A large number have passed up the advantages of grazing mixed meadows because they could not afford to risk losing one or more animals.

The introduction of that splendid new legume, Ladino clover, has aggravated a bad situation. Beef cattle seem to be more subject to bloat than dairy cattle. But all will die with shocking suddenness on alfalfa, red clover, crimson clover, or even trefoil.

Progress in seeking relief is slow because there is a complete lack of statistics on such losses. Furthermore, bloat cannot be produced experimentally for study. Under seemingly identical conditions, animals will bloat when they have for years had no difficulty.

If we are going to enjoy the greatest advantages from a greatly expanded grass program, we must use pasture to the limit. And good pasture must include legumes. It is imperative that an extensive, well-coordinated program of research on bloat be set up at once.

Kirk Fox

YOU'VE DREAMED OF OWNING A GIANT LIBRARY-SIZE DICTIONARY LIKE THIS!

TAKE IT FREE!

—as Your Gift for Joining "America's Biggest Bargain Book Club"!

This Brand-New World Edition of

WEBSTER'S ENCYCLOPEDIC DICTIONARY

OVER 2,000 GIANT PAGES! SHIPPING WEIGHT OVER 10 LBS!

More Than 140,000 Definitions! Maps! Color Plates! Complete World Atlas! Latest Official Census Figures!

ACTUALLY WORTH $22.50 in Publisher's Edition

We give you this gift only because we KNOW that thousands of folks will join the club on this amazing offer.

BRAND NEW!

A DOZEN Volumes in ONE!

Partial Contents:

Forms of Address and Greeting

Signs and Symbols used in Astrology, Biology, Chemistry, Commerce, Finance, Mathematics, Medicine, Pharmacy, etc.

List of Given Names

Tables of Weights and Measures

Constitution of U. S. Declaration of Independence

Presidents and Cabinet Officers

Distances Between Cities

Principal Mountains, Lakes, Rivers, Waterfalls, Dams, etc.

List of Colleges, Universities in the U. S.

COMPLETE NEW 1950 CENSUS FIGURES FOR EVERY U. S. CITY & TOWN

CHARTER AND FLAG OF THE UNITED NATIONS and ATLAS OF THE WORLD—in Full Color!

COMPLETE OUTLINE OF THE ENGLISH LANGUAGE: Origins and Forms of Speech, etc.

DICTIONARY OF SYNONYMS, ANTONYMS AND ANALOGOUS WORDS

FULL COLOR PLATES of natural phenomena: animals, birds, gems, reptiles, flowers, insects, fish, trees, shrubs, etc.

A Truly GIANT Volume 8" by 10½" by 5 INCHES THICK!

26 Thumb-Index Gold-Gilt Stamped Cloth Bind and Four Bound Decorated Page Edges!

SHIPPING WEIGHT 10 LBS!

Better Marks for Youngsters At SCHOOL!

Just imagine how helpful this giant dictionary will be in your youngsters' school work! With this great authority on your bookshelf, a whole treasure-chest of accurate information will be at their fingertips every day—to help them get better grades and get more out of their school work.

Relive music and word-building fans will find this great authority invaluable in identifying obscure words, phrases and objects.

JUST OFF THE PRESS—After 10 Years of Preparation At a Cost of Nearly ONE MILLION DOLLARS! Filled With Last-Minute Information on THOUSANDS of Subjects

AT LAST you can own the magnificent new 2,000-page WEBSTER'S ENCYCLOPEDIC DICTIONARY. You do NOT pay its regular price of $22.50. You get it FREE, as a new-membership gift from "America's Biggest Bargain Book Club." And your get it NOW . . . to use and enjoy from the very *beginning* of your enrollment.

Defines Over 140,000 Words and Phrases

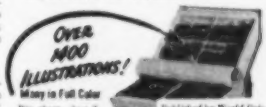
Between the handsome, gilt-stamped covers of your Webster's Encyclopedic Dictionary lies the very *heart* of everything you want to know about the language you use every day—and about scores of *other* everyday subjects, as well.

A DOZEN Volumes in One

This massive Work presents a fascinating array of brand new 1952 facts about the world you live in; its newest terms; geography, natural wonders; arts; sciences, etc. It includes an Atlas of the World in *full color*, and more than 1,600 clear illustrations and maps. Metric System of Weights and Measures, newest census figures for every city and town in the U. S. A., Forms of Address and Greeting, etc.

But You Must Act AT ONCE

This amazing offer may never be repeated. So fill in the valuable coupon below—mail it TODAY and your giant WEBSTER'S DICTIONARY will be sent to you AT ONCE—*free*—to use and enjoy for a *lifetime!*



Big, sharp, clear illustrations throughout will help you visualize the facts you read about.

Published by World Publishing Co. and not by original publishers of Webster's Dictionary or successors.

SEND NO MONEY! PAY POSTMAN NOTHING!

—And You ALSO Get

This Inspiring Best-Seller

"THE GREATEST STORY EVER TOLD"

By Fulton Oursler

The reverent and beautifully-told story of Jesus which has thrilled millions of readers the world over. (Your first Club book at nearly HALF the publisher's edition price of $2.95!)

OR, Take One of THESE Best-Sellers:

THE GOWN OF GLORY, by Agnes S. Turnbull—Delightful story of "home-and-hearty" family—their good times, loves, struggles and triumphs. **Pub. Orig. Edition, $3.75.**

THE SARACEN BLADE, by Frank Yerby—Swashbuckling adventure, sensuous romance in 13th Century Italy, by author of "A Woman Called Fancy." **Pub. Orig. Edition, $3.50.**

THE PRESIDENT'S LADY, by Irving Stone—Between Andrew Jackson and the Presidency stood the girl he loved and her reputation—"Adulteress!" **Pub. Orig. Edition, $3.50.**

Here's All You Do To Get Your FREE GIANT DICTIONARY:

1 Simply mail coupon WITHOUT MONEY—and your mammoth WEBSTER'S NEW WORLD DICTIONARY of the American Language, Encyclopedic Edition, will be sent to you *immediately*, as a new membership GIFT from the Book League of America. Most amazing, you will *pay nothing*, *owe nothing* for this handsome volume—worth $22.50 in publisher's edition. WITH it will come either the best-seller, "The Greatest Story Ever Told," or any OTHER book you select in the coupon.

2 You Choose Your Own Best-Sellers. Thereafter you will CONTINUE to receive YOUR OWN CHOICE of best-selling books by authors like Somerset Maugham, Daphne du Maurier, Van Wyck Mason, etc. You choose after reading an advance description of each book in the Club's free publication, "Review."

3 Your Savings Are Tremendous. Although the book you select each month may be selling in publisher's edition for $3.00 or even *more*, YOU pay only the Club's bargain price of $1.49, plus few cents for shipping—a saving of $1.50, or more! Just think of the great savings you'll make on the twelve books you take during the year!

SEND NO MONEY

Mail Coupon for FREE DICTIONARY Now!

Mail the coupon NOW—WITHOUT MONEY—and enjoy this generous gift WITHOUT DELAY. Enjoy, too, the best-seller you select in the coupon. Then you'll realize how much pleasure you're going to get from your membership—at TREMENDOUS savings!

BOOK LEAGUE OF AMERICA
Dept. SF-10, Garden City, N.Y.

BOOK LEAGUE OF AMERICA
Dept. SF-10, Garden City, N.Y.

Please send me FREE—the brand new 1952 giant WEBSTER'S DICTIONARY, over 2,000 pages, weighing 10 lbs., and enroll me as a member. Also send me as my first Club Selection, the new best-selling novel I have checked here:

☐ **The Greatest Story Ever Told** ☐ **The Saracen Blade**

☐ **The Gown of Glory** ☐ **The President's Lady**

The best-selling book I choose hereafter must be either the regular Selections or one of the other popular books described in the Club's monthly "Review." Although the same titles may be selling for $3 or more in publishers' editions I am to pay only the club's member's price of $1.49 each, plus few cents shipping charges; and I may cancel my subscription at any time after buying twelve books. No dues, no further cost or obligation.

GUARANTEE: If not delighted, I will return Dictionary and first Selection in 7 days, and this membership will be cancelled.

Mr. / Mrs. / Miss / ..... PLEASE PRINT

Address .....

City ..... Zone No. (if any) ..... State .....

☐ **YOUR NAME STAMPED IN GENUINE 24-KT. GOLD:** ☐ Check here if you want DeLuxe Edition with full name (as you print it below) stamped on cover of Dictionary in genuine gold; only $1 extra. (Send no money now—full will come later.)

(Print here name you want stamped in gold.)

*In Canada, $1.49 plus shipping. Address: 105 Bond St., Toronto 2

"Wonderful...but you should see the new rooms at the SHERMAN in Chicago"

REDECORATED FOR YOU!

1,500 new rooms...ready and waiting to make your next stay in Chicago the best ever. Unsurpassed for comfort...unequalled for convenience! Drive-in garage...radio...television

CHICAGO'S WORLD FAMOUS RESTAURANTS

COLLEGE INN

PORTERHOUSE

Well of the Sea

World Famous Hotel

THE SHERMAN Chicago

Frank W. Bering, Board Chairman • James A. Hart, Pres.
Pat Hoy, V. P. and General Manager

What's new *in farming*®

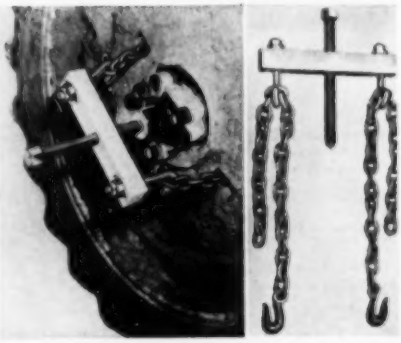
Tips you can use today

Poultry feeder. This machine delivers up to 500 pounds of feed per hour without use of chains. A single motor keeps feed flowing along the trough by moving the trough back and forth sharply in ¾-inch strokes. An almost limitless variety of trough lengths and arrangements is possible because of the absence of corner mechanisms. It is said that heavy feed particles do not settle to the bottom nor does light feed sift to the top. Feed drops from one trough into another located at right angles, making it possible to do away with gears and corner sprockets. —*James Mfg. Co., Fort Atkinson, Wisconsin.*

Hammer nail clip. This clip fits over the head of most hammers and holds shingle nails or spikes. It is handy, according to the manufacturer, for form work, roof framing, scaffolds, and other tasks where reaching or holding is required in nailing. It allows the use of one free hand while starting a nail.—*Amsco Co., Le Center, Minnesota.*

Portable pail heater. This compact unit is hooked on two nails or screws and can be easily moved if necessary. The electric element, rated at 120 volts, 1500 watts, is turned on by hanging the pail on the switch lever. Current goes off when the pail is removed or when water boils down to the heating-element level. Approved by the Underwriters' Laboratories.—*Edwin L. Wiegand Co., 7804 Thomas Blvd., Pittsburgh 8, Pennsylvania.*

A tractor-wheel puller. This puller has self-centering hooks that assure a straight, even pull on the axle. Two ⅜-inch chains, 3,720 pounds proof test, are each 3 feet long. According to the manufacturer, the ⅞-inch screw provides adequate force to pull the toughest tractor wheel. By first removing the wheel, usually rusted and difficult to remove, the axle shaft can be cleaned and the wheel replaced to the desired row width.—*Owatonna Tool Company, Owatonna, Minnesota.*



Repeated Washing Can't Mar Its Matchless Beauty!

Dominant color is SUPER KEM-TONE Sunset Rose, woodwork is KEM-GLO. Entire color scheme chosen from the SUPER KEM-TONE Color Album.

Give Your Home a Treat TO THE BEST IN BEAUTY!

Super Kem-Tone

Your home deserves the best in beauty...and here's beauty at its best that everyone can afford . . . SUPER KEM-TONE! This amazing new wall paint is so easy to wash because dirt can't penetrate its tough, tight surface. Think of it! More than a hundred lovely, washable colors. SUPER KEM-TONE is so easy to apply and dries so quickly that you get a colorful "new" room in a day. And for your woodwork, there are matching colors in KEM-GLO, the miracle lustre enamel.

NO THINNING ...JUST STIR AND APPLY

$1.65 QUART $5.19 GALLON
(Deep Colors Slightly Higher)

IT'S GUARANTEED WASHABLE

After it is thoroughly dried, tests show SUPER KEM-TONE will withstand repeated washings with usual household cleaners without losing its beauty. Dust, grime, grease, even crayon marks wash right off its tight, rubber-tough surface. SUPER KEM-TONE is ***guaranteed washable or your money back*** by seven leading paint companies:

Acme Quality Paints, Inc., Detroit John Lucas & Co., Inc., Philadelphia
W. W. Lawrence & Co., Pittsburgh The Martin-Senour Co., Chicago
The Lowe Brothers Co., Dayton Rogers Paint Products, Inc., Detroit
The Sherwin-Williams Co., Cleveland

If you wish, we will gladly recommend a reliable painting contractor.

$1.45 PINT
$2.49 QUART
$8.35 GALLON

America's Favorite and Finest Enamel! KEM-GLO

LOOKS AND WASHES LIKE BAKED ENAMEL

Now . . . have lovely, colorful walls and ceilings in your kitchen and bathrooms . . . easy to keep sparkling clean . . . with KEM-GLO, the durable enamel that washes as easily as your refrigerator. Ideal, too, for all woodwork throughout your house and for indoor and outdoor furniture. Even boiling hot water won't hurt its lovely finish. One coat covers most surfaces . . . dries in 3 or 4 hours. Color-matched to SUPER KEM-TONE.

SUPER KEM-TONE, KEM-GLO AND KEM-TONE ARE SOLD AT LEADING PAINT, HARDWARE, LUMBER AND DEPARTMENT STORES EVERYWHERE

This advertisement No. SKT-5209-B appears in Sunset, September; Good Housekeeping, Household and Successful Farming, October, 1952

Don't be without this Ray-O-Vac 2-cell flashlight. Precision-built. Brilliant, wide-angle beam

they stay fresh—

. . . they *keep* fresh for years when not in use . . . always ready for instant action in any emergency—because they're *sealed in steel*. When we say "Light when you need it," we really *mean* it. Always, get genuine Ray-O-Vac Leakproofs—the only flashlight batteries that give you . . .

Each Battery Carries This Guarantee: "If your flashlight is damaged by corrosion, leakage or swelling of this battery, send it to us with the batteries and we will give you FREE a new, comparable flashlight with batteries."

Only genuine Ray-O-Vac Leakproofs are *sealed in steel!*

1. Steel top
2. Multi-ply insulation
3. Steel jacket
4. Steel bottom

Buy Spares — they stay fresh!

© 1952 BY RAY-O-VAC COMPANY, MADISON, WIS. RAY-O-VAC CANADA, LTD. - KITCHENER, ONT.

Books

for your pleasure and profit

By Robert West Howard

This is the time of year when, with harvest pretty much under control, a man's tempted to lean against a fence post and do a bit of wondering about nature. Where did our crops come from? Why did the weeds follow along like hungry puppies? How much can we learn, of practical value, from the dim beginnings of agriculture's family tree?

Dr. Edgar Anderson, director of the Missouri Botanical Gardens in St. Louis, has just written an "extra-pair-of-spectacles" book. After reading it, I saw a lot more in my crop plants and their weedy eighth cousins than I'd ever seen before. Doctor Anderson tells about his research into the history of corn, sunflowers, wheat, cotton, beans, and other common plants. He comes up with evidence that further research into crop history will give us clues to higher yields and new varieties.

This is an exciting, and authoritative, book that can set off some mighty important discussions in farm circles this winter. Its title is **Plants, Man and Life** (Little, Brown & Co., 34 Beacon St., Boston, Massachusetts, $4).

A booklet of deep interest to all farm families is **A Survey of Soviet Russian Agriculture** by Lazar Volin of the U.S.D.A. Office of Foreign Agricultural Relations (Agricultural Monograph 5, United States Department of Agriculture, Washington 25, D. C., $1). Doctor Volin has studied all available data on Soviet farming, analyzed it with an eye to the Politburo's tendency for exaggeration, and produced 194 pages of statistics and fact that give a clear picture of crop production, research, and the status of rural collectivism behind the Iron Curtain.

The story of rural electrification and the part that government and the co-ops have played in it through R.E.A. is the subject of **The Farmer Takes a Hand** by the newspaper columnist, Marquis Childs (Doubleday & Co., 570 Madison Ave., New York 22, New York, $3.50). Mr. Childs is a veteran historian in the field of farm cooperatives. This report of the great, and often angry, power revolution that has raced across the American farmlands since 1932 is good reading.

Another old hand at writing for, and about, farm cooperatives has just come up with a book that will make good reading before you take off for the American Royal or the International Livestock ex-

positions. **Men, Meat and Miracles** by Bertram B. Fowler (Julian Messner, Inc., 8 W. 40th, New York 18, New York, $3.50) is a fast-moving history of the American meat-packing industry, with a roundup of new by-product markets, and some formidable conclusions.

Child discipline is always one of our biggest problems. And I guess parents have always complained, "Youngsters don't behave as well as they did when I was growing up." Drs. Norma E. Cutts and Nicholas Moseley asked advice from 6,000 parents in preparing the valuable array of child problems and parental procedures in **Better Home Discipline** (Appleton-Century-Crofts, Inc., 35 W. 32nd St., New York 1, New York, $3.50). The book covers most of the problems that youngsters between 3 and 17 can create, and emphasizes Father's part in the upbringing.

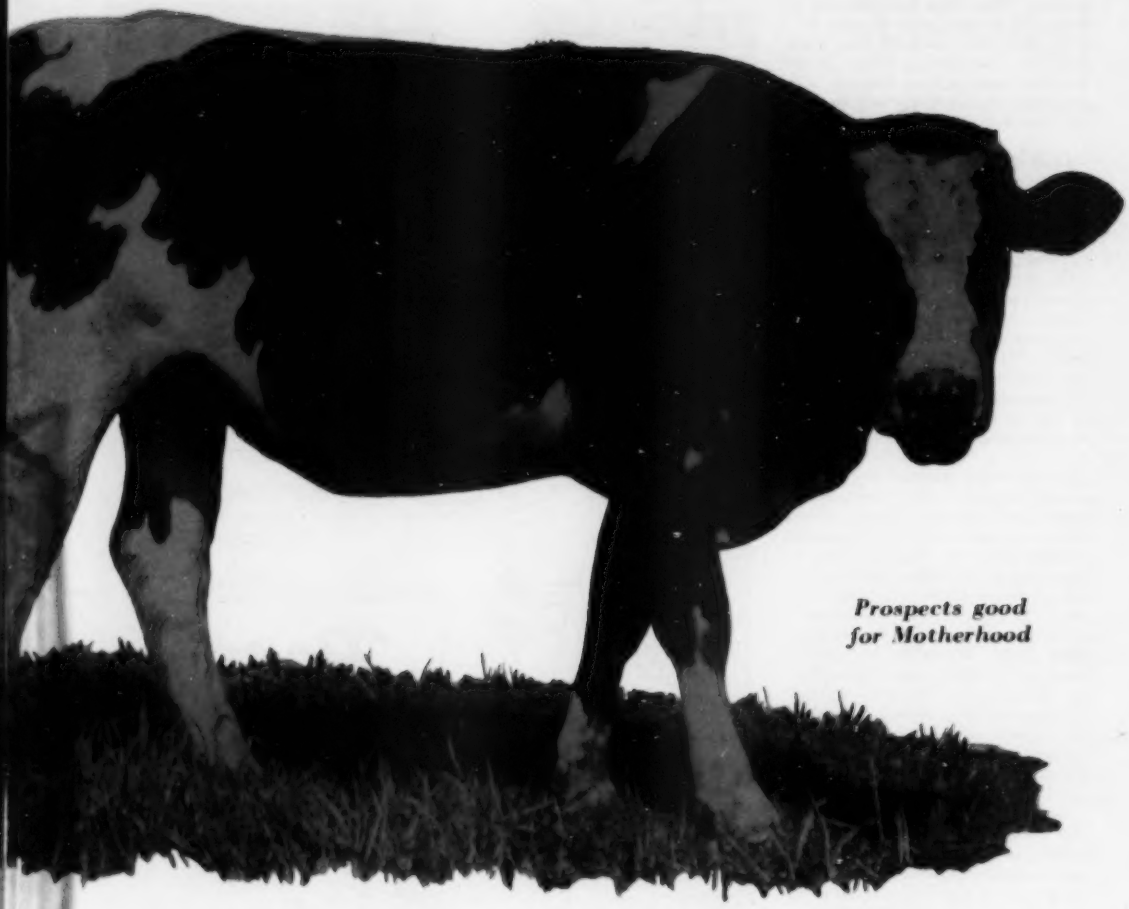
No building in America, not even the national Capitol, shouts "freedom" so loudly as the little white church standing boldly on a country hilltop. Irrespective of denomination or creed, it speaks for the finer things of life—those inner qualities that add up to liberty. You'll have renewed faith in your own church and in the American way after reading **Meeting-house Hill: 1630-1783** by Ola E. Winslow (The MacMillan Co., 60 Fifth Ave., New York 11, New York, $4). Miss Winslow traces the growth of freedom and gives us an excellent picture of the rigors of "meetin' time." This is a splendid book, and very meaningful in 1952.

Another hill, just outside Syracuse, New York, has a unique place in both English and American history. Leonard Jerome, born in a farmhouse on its slopes, ran away from home to become a newspaper reporter. He eventually made a fortune in the stock market and married his daughter off to Lord Randolph Churchill. So Onondaga Hill is "Grandpa's place" to Winston Churchill. Robert Lewis Taylor doesn't include that in his biography, **Winston Churchill** (Doubleday & Co., 570 Madison Ave., New York 22, New York, $4.50). Mr. Taylor doesn't miss much else, though, in his delightful life story of the "redheaded scamp" of Blenheim Castle who became the greatest statesman of our time. **END**

SUCCESSFUL FARMING

Wait'll you eatum, you just can't beatum—new, improved Post Toasties are the *heap good* corn flakes. Heap nourishing, too! And the triple-wrap package brings 'em to you crisp as can be, really fresh. Your whole tribe'll shout for "seconds" when you dish up Post Toasties. So, be sure you get a big box right away quick.

BEST THING THAT'S HAPPENED TO CORN SINCE THE INDIANS DISCOVERED IT!



A brand new form of Vitamin A has been developed by Pfizer scientists for livestock and poultry feeds. It has these outstanding features:

Unusual stability. The new product is protected by a special gelatin coating which gives it unusual stability in many feeds, particularly mineral supplements assuring full potency . . . right to your feedlot.

Availability. Unit for unit, the animal actually gets more Vitamin A with Pfizer's new development. It is wax-free, oil-free—makes the full potency available, usable to your flocks and herds.

Addition of Pfizer's new Vitamin A to the ration makes feeding more effective for all livestock and poultry. This is especially true of calves and with heifers before the first freshening.

Ask your feed dealer if the feeds you buy are fortified with Pfizer's new Vitamin A.

Vitamin A

. . . from the world's largest producer of antibiotics

Pfizer

Chas. Pfizer & Co., Inc., Brooklyn 6, New York
Headquarters for antibiotics and vitamins for animal health and nutrition

Agriculture's public relations: We're telling the farm story

The editors of *Successful Farming* have launched this country's first nationwide effort to tell the farmer's true story to his customers in the city

By Jim Roe

Farming in America has changed so dramatically in the last decade and a half, that we all are literally members of a new business.

Most of these changes have been for the better:

. . . . The disasters of mass bankruptcy and prolonged bad weather are but memories—vivid though those memories are.

. . . . Agricultural science and industry have given us techniques and tools to produce more food per man—and better food—with a physical ease unknown to our fathers.

. . . . Our women and children have been given a standard of living—on the farm—at a level we formerly only dared dream about.

But there has been one bitter price.

We have lost the friendship and respect of many of our friends and customers in the cities. Busy in our fields and barns—knowing we were doing nothing to earn the censure of any fellow American—it was hard for us, at first, to grasp this fact.

As the attacks on farmers got under way, it became apparent they were more than mere sporadic beefs against beefsteak prices. It was abundantly clear that these attacks were organized, timed, and planned.

It was clear that mere honesty on the farmer's part would not stop them. Organized attacks force an organized defense.

In December of 1951, *Successful Farming* printed the first article to bring the problem fully into the open. We said:

"A great many people are hard at work these days, tying big tin cans to agriculture's tail . . ."

In that *Successful Farming* article, we called for an organized agriculture to rise aggressively—yet fairly and honestly—to its own defense:

". . . we must tell our country, sell our customers . . ." And we pointed out many ways in which to do it.

Since that time, many voices have joined ours, calling for more adequate agricultural public relations.

But we must do more than talk to ourselves.

Some 9 out of 10 of the 1,250,000 copies of *Successful Farming* printed each month go to actual farmers—members of our own farming family. Our first task was to have that family united. In April, 1952, we followed with Karl Butler's thoughtful and timely plea: "Can Farmers Pull Together?"

We think they can. And we think it is altogether fitting that we again take the lead, to put our thoughts and convictions into action.

This is *Successful Farming's* 50th year of friendly visits in American farm homes. We hope for 10 times 50 more—during which American farmers will realize all the exciting possibilities our editor, Kirk Fox, points out in *Successful Farming's* new book, *New Farm Horizons*, announced on page 164 of this issue.

But to remain strong, agriculture must remain respected.

Accordingly, the editors of *Successful Farming* have launched America's first national effort to take the farm story to the cities. Helping us is America's best-known "bridge" between farmers and city folk—author-farmer Louis Bromfield.

Each Saturday this fall, Louis Bromfield will conduct a farm press conference on a national radio network. Guests will be those persons who can best ask—and others who can best answer—our city neighbors' questions.

You will want to hear these programs by—and on behalf of—agriculture. We will want your suggestions as this pioneering effort goes along. And we hope that others—as interested in agriculture as are we at *Successful Farming*—will join in and help expand this effort toward better farm-city understanding.

Where and when to hear Louis Bromfield:

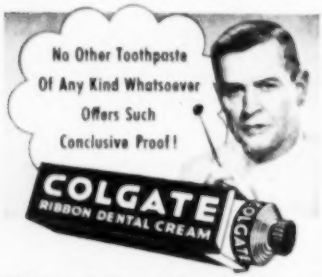
Successful Farming's *farm press conference will be carried on most Mutual Broadcasting System radio stations from 11:30 a.m. until noon each Saturday this fall starting September 6. Be sure to listen as Louis Bromfield, farmers, and agricultural leaders tell* your *story.*

Brushing Teeth Right After Eating with
COLGATE DENTAL CREAM
STOPS BAD BREATH AND STOPS DECAY BEST!

Colgate's Instantly Stops Bad Breath In 7 Out of 10 Cases That Originate in the Mouth!

It cleans your breath while it cleans your teeth! Brushing teeth right after eating with Colgate Dental Cream gives you a *clean, fresh* mouth *all day long!* Scientific tests *prove* in 7 out of 10 cases, Colgate's *instantly* stops bad breath that originates in the mouth. No other toothpaste has proved so completely it stops bad breath. No other cleans teeth more effectively, yet so safely!

Yes, the best way is the Colgate way! In fact, brushing teeth with Colgate Dental Cream right after eating is the most thoroughly proved and accepted home method of oral hygiene known today. The Colgate way stopped more decay for more people than ever before reported in dentifrice history! Yes, to help stop bad breath and tooth decay at the same time, the *best* way is the *Colgate* way!



PURE, WHITE, SAFE COLGATE'S WILL NOT STAIN OR DISCOLOR!

The farmer's Washington

By Richard Wilson

- **Farmers have parity choice in fall election**
- **Republicans must win the Midwest vote**
- **Soil-saving program is hitting some snags**

The choice. As far as the issues are concerned, the choice farmers have in the election this fall is this: 90 percent of parity with the Democrats—a sliding parity-price scale with the Republicans.

One observer here says: "The Democrats have the best political argument. But the Republicans have the best economic argument."

There's been a laboratory experiment this past season on which argument may be right. Under the impetus of a 90-percent guaranty put into effect by Secretary of Agriculture Charles F. Brannan, a wheat surplus accumulated. If the 90-percent guaranty continues to pile up surpluses, the Republicans will say, "I told you so."

Goodwin's problem. Robert Goodwin, head of Republican farm campaign activities under Dwight D. Eisenhower, came hurrying into Washington with a problem as the campaign got under way.

Goodwin's problem was that some of the Iowa and Midwest Eisenhower people were complaining. They said a Taft man had been put in charge of farm activities for the G.O.P., and it wouldn't rest well with the farmers.

Rumblings had come from Senator Bourke B. Hickenlooper and Governor William Beardsley of Iowa. Goodwin's activities in the convention had caused a great hassle among Iowans and other Midwesterners. Goodwin wrestled with his soul during the convention and finally voted for Taft. Beardsley and Hickenlooper were for Eisenhower.

Lying behind the problem Goodwin tried to iron out in Washington was the anxiety of some of the Eisenhower supporters. They figured the Iowa farm leader might wind up as secretary of agriculture in an Eisenhower administration. Many Eisenhower backers would rather have either Representative Clifford Hope or Senator Frank Carlson, both of Kansas.

In the campaign, Eisenhower has tried to insure the maximum of old-line Republican support, reasoning that he has to be sure of this. Once sure, he can move on to win the Independent and Democratic vote necessary to elect him.

But, more than anything else, the Eisenhower campaigners want to make sure they don't lose the Midwest again. And they think the big farming state of Iowa is the key. Iowa went Democratic in 1948 because the farmers didn't have confidence in Dewey.

Plans for 1953. Fifteen years ago when the old A.A.A. was declared unconstitutional, the New Deal farm planners scrambled around for a substitute. Some of them came up with what was called the "Farm Management Program." But it didn't go through because then there was less legal basis for it than the old A.A.A.

Now, the Farm Management Program has come to life in different form, but essentially the same. In 1953, under a newly announced Brannan program, local community committeemen will visit each farm—in theory—to work out a conservation plan for that farm.

Congress laid the groundwork by authorizing each county committee to spend up to 2½ percent of its funds to work out these individual farm plans. In typical Midwestern states, where the conservation program is most popular, the average payment is running around $60 per farm.

Soil-saving drawbacks. A good many farmers, however, don't think it is worth it to go ahead with the soil-saving practices recommended by the Department of Agriculture.

Recently, the U.S.D.A. completed a survey in conjunction with Iowa State College. The principal reasons given why farmers stay out of the program were these:

A major change would be required in the entire operations of many farmers. And they would be required to shift from corn and hogs to a fairly complete livestock-forage program.

Many farmers simply don't have the money. Their mortgages and living costs are so high that they would have to borrow the cash to get started. Too few rental agreements provide for sharing the costs of soil improvement with the owners.

Finally, a great many farmers don't expect to continue farming the place they are on very long. And they don't want to get involved in costly, long-range projects. One of the strange results of the survey was that 41 percent of those surveyed said they didn't expect to remain on the places they were farming very long.

[*Turn to page 18*

PARTNERS IN AMERICAN BUSINESS are these stockholder-owners of Standard Oil. Here Robert J. Owens, Elizabeth B. Moran, and Lorna Sullivan are inspecting a model of oil field equipment on display at Chicago's Museum of Science and Industry.

Ever wonder what it's like to own an oil well?

BARRELS OF OIL gushing up in your back yard is the dream most of us have had at one time or another, though it very rarely comes true. In most cases owning an oil well is accomplished in another way.

Of course, in our case, every one of the more than 120,000 stockholders of Standard Oil not only has an interest in thousands of wells, but every stockholder is part owner of many other kinds of facilities, too. For Standard Oil and its subsidiary companies find new sources of oil, drill hundreds of wells in proved fields, transport oil to our refineries —and distribute finished products to many thousands of service stations, industries and homes.

"Owning a well" by having an interest in Standard Oil works two ways:

First, your ownership brings you a return in the form of dividends paid out of the company's profits. And of course, the company has an obligation to its owners to endeavor to operate at a profit. 1951 was our 58th consecutive year of paying dividends, and our stockholders last year received dividends with a value equal to $3.95 per share.

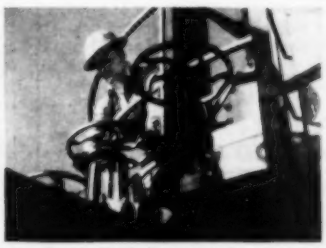
Second, your ownership helps the company . . .

- to keep on expanding facilities to furnish the petroleum so essential to America's future security.
- to provide an abundant supply of more than 2,000 quality petroleum products to our millions of customers—and at reasonable prices.
- to join in keeping strong the very economic system which has been this nation's backbone.

That is what it's like to "own an oil well" through having ownership in the Standard Oil Company. And, basically, that is what it's like to have a share in many other American businesses.

Standard Oil Company (INDIANA)

OWNERSHIP IN OUR COMPANY is held by both individuals (including about 28,000 of us who are employee-owners) and institutions—educational institutions like Colorado College, Colorado Springs, Colorado; charitable organizations; insurance companies and business firms. No institutional stockholder owns so much as 4% of our stock; no individual owns so much as 1%.



OWNERSHIP IN OUR COMPANY is backed by extensive facilities, including efficient equipment at modern refineries like the one at Casper, Wyoming, where Fred L. Meyenfeldt works. The skills of our 49,700 employees, backed by an average of $31,400 in tools and equipment, enable each of them to do a better job and to have steady work at good pay.

OWNERSHIP IN OUR COMPANY by our stockholders helps agent "Woody" Everett give better service to Elmer Curl, one of his regular customers in Stewartsville, Missouri. Because we have been able constantly to expand our facilities, our thousands of agents like "Woody" can offer their customers an assured and steady supply of high quality gasoline—at surprisingly low prices.

INCREASE YOUR PROFITS – Safeguard Your Farm, Your Livestock, Your Crops!

Let these experts help make your farm more productive and profitable

LAW ON THE FARM

by H. W. HANNAH

Here's your best legal adviser, and one that saves you big legal costs. A complete easy-to-understand farm law guide. And in this business of farming you need to know the law, because there are more contracts and legal matters to take care of than in any other occupation. This book helps you conduct a prosperous, efficient farm business. No more long hours of worry over involved legal reports. There are corners you can cut, privileges you can claim, disputes you can settle quickly, if you know the law. This book keeps the law on your side. Covers 275 topics with a special section on forms and how to fill them out. $4.95

Spraying, Dusting, and Fumigating of Plants

by WALTER S. HOUGH and A. FREEMAN MASON

Get rid of crop losses caused by plant pests and weeds for good. Know how to use the new chemicals, new methods of application, new equipment that can add hundreds, even thousands of dollars to your farm income every year. This new, 726 page book puts all this information at your finger tips. Hundreds of methods are described, covering every conceivable problem . . . all approved and recommended by the country's leading agricultural experts. There are countless photographs, charts, drawings, and chemical formulas that will guarantee bigger, better crop yields. When you think of the money this book can earn for you, the price is dirt cheap. $12.50

LIVESTOCK and POULTRY DISEASES

by W. A. BILLINGS, D. V. M.

Do farm animal diseases cost you money every year? This authoritative, up-to-date book is your answer. It gives you practical, easy-to-understand information on the care of cattle, horses, sheep, swine, and poultry. Tells you how to prevent and treat all kinds of costly animal diseases. Here are the facts you need to know—proper care and treatment of pregnant animals; how to prevent sickness through sanitation, and hundreds of other helpful, money-saving ideas. Written by a veterinary who knows the farmer's problems and how to solve them. $4.95

Send Today for Your Copies on 10 DAY TRIAL!

THE MACMILLAN COMPANY
Dept. SF-2
60 Fifth Avenue, New York 11, N. Y.

Please send me books checked for a free 10-day trial. If I do not return the books within 10 days, you may bill me.

☐ LAW ON THE FARM by H. W. Hannah, $4.95
☐ LIVESTOCK AND POULTRY DISEASES by W. A. Billings, $4.95
☐ SPRAYING, DUSTING AND FUMIGATING of PLANTS by Hough and Mason, $12.50

NAME .....

ADDRESS .....

CITY ..... ZONE.... STATE.....

Farmer's Washington

From page 16

This included both tenants and farmers expecting to retire.

Farmer-Labor again. Whatever the outcome of the election, a new force has risen in the Democratic Party which will be heard from a great deal in the future. This is the group which revolves around Senator Hubert Humphrey of Minnesota, Senator Blair Moody of Michigan, Governor G. Mennen Williams of Michigan, and Representative Franklin Delano Roosevelt, Jr., of New York.

These men put up their fight at the Democratic Convention to require all Democrats, mainly the Southerners, to be "loyal." They lost. But they have not given up.

Some observers think their objective is far broader than anything which appeared on the surface at the Democratic Convention. These men are looking, it is believed, to an alliance between the workers and the farmers to create a great political force which can take over the Democratic Party. Such an alliance does exist in the state of Minnesota. It is called the "Democratic Farmer-Labor Party."

The young firebrands are convinced that there are some long-range changes occurring in the Democratic Party in the South which will come to fruit 4, 8, 12, or 16 years from now. And these individuals will probably still be around in some capacity. When that time comes they want the new, liberal party of the South to join hands with workers and farmers of the North to form the most powerful political alliance the country has ever seen. And, of course, they would like to be in a position to run it.

This is fairly long-range planning, but may be moving faster than most people think. A Republican victory might spur it along, particularly if some of the old-line states of the South and the Middle Border voted heavily for Eisenhower.

Grants-in-aid. Few farmers know it, but the Agricultural Conservation Program is supposed to go on the basis of direct grants to the states for carrying it on. This would supposedly end the centralized control in Washington and put the farm program on a modified state basis.

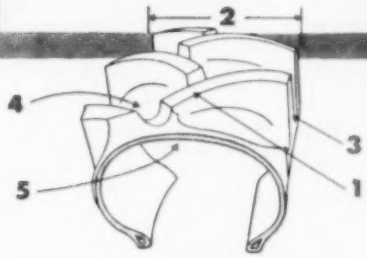
The idea was that when the program was authorized in 1936, the grants-in-aid would begin two years later. This is still provided in law. But every time the act has been renewed, Congress postpones the date when the program will go on a state basis. The theory is that this will give the states more time to enact the necessary enabling legislation.

Many members of Congress would like to eliminate the grants-in-aid feature altogether, but a majority has felt the provision should be continued. Just when the program will go on a state basis, however, is a puzzle. It looks as if Congress will just continue to dilly-dally on the subject. **END**

You Get More for Your Money With Firestone Tractor Tires Because

THERE IS MORE BUILT INTO THEM!

Only **Firestone**
CHAMPION
OPEN CENTER TRACTOR TIRES
Give all these Extras:



1 CURVED AND TAPERED BARS . . .
For a sharper bite and deeper penetration . . . greater draw bar pull.

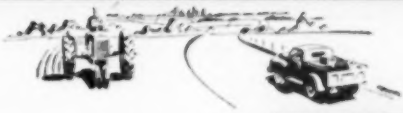
2 WIDE, FLAT TREADS . . .
For more biting edge, full-width traction and longer life.

3 BIGGER, STRONGER SHOULDERS . . .
For greater tread contact, for a bigger bite and longer and more even tread wear.

4 FLARED TREAD OPENINGS . . .
To prevent soil jamming and to permit easy soil release.

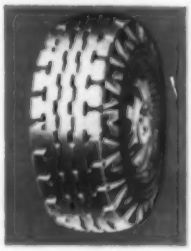
5 DUAL SHOCK PROTECTORS . . .
Extra tread plies to absorb severe impacts.

6 FIRESTONE LIFETIME GUARANTEE . . .



America's Future Progress Depends on Better and Safer Highways

Firestone
CHAMPION HEAVY DUTY TRUCK TIRE
A new, rugged, low-priced tire that is built for all-around farm truck service.



THERE ARE MORE FARM TRACTORS ON FIRESTONE TIRES THAN ANY OTHER MAKE

Enjoy the Voice of Firestone on radio or television every Monday evening over NBC

Copyright, 1952, The Firestone Tire & Rubber Co.

Here's how *for home painters*

Wire handles cut your hands? Here's a simple trick to prevent that. Slit a piece of garden hose, slip it on the handle. Result: a comfortable hand grip. Another neat trick when repainting your house: use Devoe's new Wonder-1-Coat House Paint and get 2-coat protection and beauty *in just one coat*.

Protect "almost-dry" surfaces. Use wax paper on newly-painted floors or stairs that may be tacky after initial drying. The wax film is harmless to the paint. Better use Devoe's Floor and Deck Enamel. It dries quickly to a tough, durable, water-resistant finish.

Stored for quick identification. If the paint in a can isn't all used, dip a pipe cleaner in the paint and make a mark on the outside of the can to show level of what's left, and what the dry color looks like. With the Devoe Library of Color system you can always find the *exact* color you want.

Avoid spattering and dribbling. When pouring from a gallon container of turpentine, hold the can with the spout *at the top!* Then the air enters freely above the liquid and the stream is steady and easy to control. Not many people know this trick.

Keep bristles straight while soaking your brushes! Simply drill a hole through the brush handle so that when a heavy wire is passed through the hole it will keep the bristles from resting on the bottom of the container. For the longest wearing paint brush, get a Superkleen Nylon brush. Used by the professionals.

You can get all the painting accessories that you need—and many more helpful tips at the sign of the Devoe Diamond. Why not stop in and see your Devoe Dealer very soon? You'll find his name listed in the Classified section of your Phone Book.

DEVOE PAINT

Come see for yourself

"Make Corn Your Nurse Crop"—
Saturday, September 27, at Research Acres
near Bloomington, Illinois.
Program begins at 11 a.m., C.S.T.

The complete story of the promising new practice of seeding an intercrop between wide rows of corn will be presented at this *Successful Farming* Field Day. The second year of extensive trials of this new cropping program is being completed at the Research Acres plots near Bloomington, Illinois.

You will see:

New seedings of clovers, grasses, and mixtures in 60- and 80-inch-wide corn rows. The identical seedings made last year—now established stands of alfalfa, sweet clover, red clover, Ladino clover, alsike clover, fescue, orchard grass, bromegrass, and mixtures of these. Sixty- and 80-inch-row corn with clovers seeded after the first, second, and third cultivation. Corn planted with an experimental mulch planter; the ground will have been gone over only twice between clover sod and the day you see it. A field of wide-row corn of over 120 acres seeded to a legume-grass mixture. A display of the various corn planters, seeders, and other equipment used in these tests.

You will hear:

The experiences and problems of other farmers, college agronomists, and hybrid-seed-corn company researchers. They will discuss seeding varieties, machinery, time of seeding, corn-row widths, corn-yield comparisons, rotation possibilities, and many other topics having to do with wide-row corn seeded to an intercrop.

You also will have a chance to ask questions.

There is a lot to cover in one afternoon, so be there by 11 a.m. You can purchase lunch on the grounds.

Overnight accommodations available in Bloomington are the Illinois, Rogers, and Tildon-Hall hotels, and Streids and Rusk-Haven tourist courts. If you plan to fly, please drop us a card so transportation from the Bloomington Airport to Research Acres can be arranged.

The program will begin at 11 a.m. Central standard time (not 12 noon C.S.T. as previously announced) with a direct report by Everett Mitchell on the National Farm and Home Hour. This will be followed by a series of speakers on the topic of the day.

In case you do not recall the feature article, "Make Corn Your Nurse Crop," which appeared on page 54 in the March, 1952, issue of *Successful Farming*—here, briefly, is the story of wide-row corn.

Wider corn rows may be the answer to the problem which has long plagued farmers—how to establish successfully a legume, grass, or small grain in corn. With wider rows, it appears a better seedbed can be prepared, and weed control is possible, as small conventional tractors can operate in the row. Competition for moisture appears to be lessened.

Two interesting opportunities presented by this system are: the elimination of a small-grain nurse crop, thus making it possible to go directly from corn to pasture or hay, and the possibility of growing continuous corn with a green-manure crop every year.

Of course, there are many other advantages of cover crops in corn:

1. Erosion protection needed on the rolling land during the winter months.
2. Legume cover crops fix nitrogen.
3. Cover crops produce organic matter.
4. There is a possibility of some fall pasture.

Probably more experimenting has been done with these wide rows at the Ohio Agricultural Experiment Station than anywhere else. Under the direction of G. H. Stringfield and L. E. Thatcher, it was found that under high fertility and a good season, yields dropped less than 10 bushels per acre at the 70-inch row width, with an intercrop seeded. When fertility and weather were adverse, the yield reduction was more serious, but as one Illinois farmer put it, "I can afford to take quite a drop in corn yield if I can go directly from corn to meadow."

Last year at Research Acres, a plot of 70-inch corn, seeded to a legume-grass intercrop, yielded over 100 bushels per acre. Results look promising again this year, with both corn and seedings looking good.

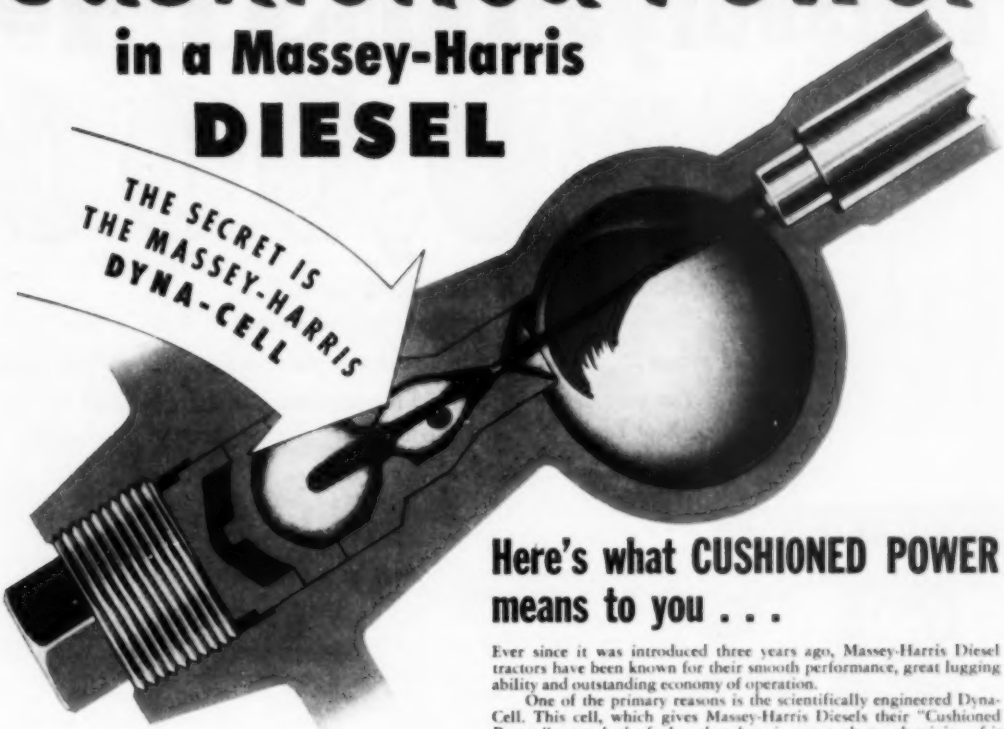
We'll be looking for you at the *Successful Farming* Field Day at Research Acres September 27.

Here's how to get there

Go 7 miles southwest of Bloomington, Illinois, on U. S. Route 66, to Shirley, Illinois. Research Acres is 2 miles straight south from there. Signs will direct you from Route 66. Get up a carload of your neighbors and come.

Cushioned Power

in a Massey-Harris DIESEL



Here's what CUSHIONED POWER means to you . . .

Ever since it was introduced three years ago, Massey-Harris Diesel tractors have been known for their smooth performance, great lugging ability and outstanding economy of operation.

One of the primary reasons is the scientifically engineered Dyna-Cell. This cell, which gives Massey-Harris Diesels their "Cushioned Power," controls the fuel so that there is a more thorough mixing of it with air for greater efficiency in fuel consumption. It provides a sustained power stroke the full length of the cylinder which means greater lugging ability. It evens out cylinder pressure so that there is less shock to crankshaft and other operating parts, quieter in operation, longer engine life.

Here's how Cushioned Power works.

Just before the piston reaches top dead center, when the compression ratio in the cylinder is approximately 15 to 1, the fuel pump injects the raw fuel across the cylinder *into* the Dyna-Cell. Naturally, a small amount of fuel remains in the cylinder where it is ignited by the heat of compression. This in turn ignites the main charge of fuel which is in the Dyna-Cell.

As this burning fuel expands in the Dyna-Cell, it forces its way out through the small opening under tremendous pressure. There is literally a "cyclone" in the cylinder — thoroughly mixing the burning fuel with air for complete, economical fuel consumption.

At the same time, this small opening controls the amount of the fuel entering the cylinder. There is more uniform combustion throughout the full stroke of the piston. This *sustained* power — a strong push instead of a sudden impact — lessens the stress on pistons, wrist pins, connecting rods, main bearings.

To these advantages of the Dyna-Cell, Massey-Harris Diesels provide all the other advantages that have won such favor among farmers everywhere — sturdy construction, easy handling, comfortable operation, long life, easy maintenance. Talk to your Massey-Harris dealer. Ask him to explain why it pays to "Make it a Massey-Harris."

Massey-Harris Diesel engines with Cushioned Power are available in the 3-4 plow 44 and the 4-5 plow 55, in the type that fits your needs.

THE MASSEY-HARRIS COMPANY
Quality Avenue, Dept. K-110, Racine, Wis.

Please send me a copy of your latest catalog on Massey-Harris Tractors

MAIL THIS COUPON

Name .....

Town ..... R.F.D. .....

County ..... State .....

Make it a Massey-Harris

HERE IT IS... *Pillsbury's 4th Annual Recipe Event*

Pillsbury's BEST 4th

$100,000

A simple recipe may win you $25,000 in cash plus thousands of dollars in bonus prizes!

758 prizes... $129,000 in total value of awards... will be given away!

You may be one of the 100 top winners. Get a free trip to the Waldorf in New York. Win an electric range, electric mixer... and cash!

EVERYDAY FOLKS WIN THE PRIZES!

You may be a big winner this year.

A 1951 Winner. Mrs. D. J. Gillian, housewife, Tonawanda, N. Y.

A 1950 Winner. Mrs. R. Brittain, stenographer, Birmingham, Ala.

JUNIOR BAKERS WIN, TOO! (Girls and boys 12, but not 20 on July 1, 1952)

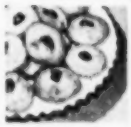
$25,875 in special Junior prizes! 184 Junior Prizes in all!

Boy wins $3,000! Jack Meili, Naval Reservist, Minneapolis, Minn.

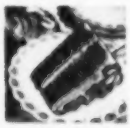
Schoolgirl wins $5,000! Helen C. Thatcher, 17, Charleston, S. C.

Foods like these have already won $427,375 IN PRIZES!

You may have a winning recipe right in your own kitchen.



$5,000 Cookies. Cherry Winks, by Mrs. Ruth Derousseau, Rice Lake, Wis.



$25,000 Cake. Starlight Double-delight Cake, by Mrs. S. P. Weston, La Jolla, Calif.

Imagine yourself in the fun and excitement of the Waldorf, carrying home the big $25,000 prize!

It can happen to YOU, just for sending in a recipe! An easy main dish, pie or dessert recipe. Or a different kind of cake, cooky, rolls or bread.

So simple to enter! Just pick out your favorite recipe, an old recipe, a favorite recipe of your church group, a foreign or novelty recipe, a time-saving recipe of today.

No fancy writing is necessary. Merely write your recipe on the official entry blank on the next page, and send it in with the Extra-Value Coupon from a bag of Pillsbury's Best Flour.

That's all you do to enter! You can get additional entry blanks at your grocer's. It's easy and fun to enter!

Hurry! 100 trips to the Waldorf... 758 prizes in all... $129,000 in awards are waiting! Enter several recipes, if you like, and give yourself several opportunities to win.

Get out your favorite recipe right now. Put your entry into the mail today!

DON'T MISS OUT! CONTEST CLOSES OCTOBER 15, 1952!

JUST FOLLOW THESE EASY RULES...

1. On an Official Entry Blank print or type your name, address, the name you have selected for your entry, and every ingredient and amount used in making your entry. Give your measurements in level (not scant or heaping) cups, tablespoons, teaspoons, or in fractions (¼, ⅓, ½, etc.). If you are a Junior entrant, check the Junior Recipe Box. If you are a Senior entrant, check the proper Senior Food Classification Box. Give baking temperature and write the approximate time required to prepare your recipe.

2. Attach firmly to the Official Entry Blank an extra-value coupon from any size sack of Pillsbury's Best Flour and one or more sheets giving instructions for making your recipe. Write on one side of the paper only. Write your name and address at the top of each sheet.

3. Enclose your entry in an envelope addressed to Pillsbury's Recipe Contest, Post Office Box 8138, Chicago 77, Illinois. Entries must be postmarked not later than October 15, 1952, and must be received not later than October 20, 1952. You may send in as many entries as you wish, but only one per envelope. All recipes and entries become the property of Pillsbury Mills, Inc. and will not be returned.

4. Every entry, to be considered, must be on an Official Entry Blank, must comply with the above rules, and must call for at least one-half cup of Pillsbury's Best Flour. No entry will be considered which calls for an intoxicating beverage, or for an ingredient not usually found in grocery stores.

5. Everyone twelve years or over on July 1, 1952, in the United States, Alaska, Hawaii, and Puerto Rico may enter—except employes of the following organizations and members of their immediate families: Pillsbury Mills, Inc., its advertising agencies, the Lloyd Herrold judging organization and practicing professional home economists. Entrants twenty years or over on July 1, 1952, are eligible for Senior Grand National awards; entrants under twenty years are eligible for Junior Grand National awards.

6. The Lloyd Herrold Company and home economists staff will judge qualified entries in the Recipe Contest on the basis of ease and speed of preparation, novelty or unusual character, general appeal and aptness of name. No entrant will be eligible for more than one award in the Recipe Contest.

7. The Baking Contest will be held in the Grand Ballroom of the Waldorf-Astoria Hotel in New York and will be limited to the eighty Senior Recipe Contest winners and the twenty Junior Recipe Contest winners. Entrants in the Baking Contest will prepare their prize-winning recipes without assistance, and entries will be judged on the basis of taste, appearance, general appeal, and novelty or unusual character. No entrant will be eligible for more than one cash award in the Baking Contest.

8. These rules are binding on all entrants. The decisions of the judges will be final. In the case of ties, duplicate awards will be made. This contest is subject to federal and local laws. Names and addresses of all winners will be furnished after January 1, 1953, on request.

for the Home Bakers of America!

GRAND NATIONAL Recipe & Baking Contest

$129,000 Total Value Awards

$25,000 First Prize!

$7,500 SECOND PRIZE!

$2,500 THIRD PRIZE!

Grand National Recipe Contest Prizes

To the 80 Senior Recipe Contest Winners and the 20 Junior Recipe Contest Winners—a trip to New York City and a two-day stay at the Waldorf-Astoria Hotel (at Pillsbury's expense) in order to compete in the Grand Ballroom of the Waldorf in the Baking Contest, plus a cash prize of $100 each.

The same trip will be provided at Pillsbury's expense for one parent or approved adult for each of the 20 Junior prize winners.

To winners of Senior Baking Contest

FIRST PRIZE..$25,000
SECOND PRIZE..$7,500
THIRD PRIZE...$2,500

Four "Best of Class" Awards

Breads and Main Dishes	$1,000
Cakes	$1,000
Pies and Desserts	$1,000
Cookies	$1,000

To the Winners of Junior Baking Contest

First Prize	$3,000
Second Prize	$2,000
Third Prize	$1,000

To the 100 Contestants in the Baking Contest at the Waldorf-Astoria

100 G-E Stratoliner Push-Button Ranges
100 G-E Mixers
100 Cosco Folding Utility Tables
100 Cosco Posture-Back Kitchen Chairs

BONUS CONTEST AWARDS* OFFERED BY GENERAL ELECTRIC:

First Prize Winner—G-E Refrigerator-Freezer Combination.
Second Prize Winner—G-E Food Freezer.
Third Prize Winner—G-E Automatic Washer.
Four "Best of Class" Winners—G-E Wringer Washers.
First Prize Junior Winner—G-E Automatic Dishwasher.

*For full information on the G-E Bonus Award appliances, see your General Electric dealer soon.

Not one... but four kinds of foods will win! **Here are the baking classifications:** **1.** Cakes **2.** Cookies **3.** Pies and Desserts **4.** Breads and Main Dishes

ENTER NOW!

Your entry must be postmarked not later than midnight October 15, 1952, and must be received by October 20 to be eligible.

USE THIS HANDY ENTRY BLANK!

OFFICIAL ENTRY BLANK Pillsbury's $100,000 Grand National

Mail to: Pillsbury's Recipe Contest, Post Office Box 8138, Chicago 77, Illinois

Name _____ Address _____

City _____ Zone _____ State _____

Check the classification in which your recipe is entered:

CONTEST CLOSES OCTOBER 15, 1952

☐ JUNIOR (Anyone 12 but not 20 on July 1, 1952) All types of Recipes	☐ SENIOR CAKES All types of Cakes	☐ SENIOR COOKIES All Types of Cookies	☐ SENIOR BREADS and MAIN DISHES Yeast Raised and Quick Breads, Waffles, Pancakes, Dumplings, Etc.	☐ SENIOR PIES and DESSERTS Including all Pies plus Puddings, Cobblers, Jelly Rolls, Shortcakes, Etc.

Your name for your recipe: _____

List below each ingredient and amount used in column indicated:

BASIC RECIPE (dough, batter or pastry) AMOUNT	INGREDIENT	FILLING, TOPPING, SAUCE, etc. (if necessary for serving) AMOUNT	INGREDIENT

Give Baking Temp. _____ °F. Baking Time: _____ Start preparation of recipe ____ hrs. ____ min. before serving.

IMPORTANT—(1) Write your name, address, and full directions on separate sheet and attach.
(2) Attach to the back of this entry blank the extra-value coupon from any size sack of Pillsbury's Best Flour.

Get additional entry blanks at your grocer's or write Ann Pillsbury, Box X, Minneapolis 2, Minnesota. Requests for additional entry blanks must be postmarked no later than Oct. 1.

CLOROX provides more than *whiteness* ...it makes linens SANITARY, too!

Clorox is the most efficient germ-killer of its kind. Besides making white and color-fast cottons and linens snowy-white, color-bright, Clorox makes them sanitary... provides added health protection!

There's no better friend for laundering than Clorox, the 4 in 1 product that bleaches, removes stains, deodorizes and makes linens sanitary. And Clorox is free from caustic, extra gentle on fabrics... an important, linen-saving feature exclusive with Clorox!

And CLOROX kills germs in everyday cleaning, too!

Yes, you safeguard your family's health every time you use Clorox... not just on washday. Bathroom and kitchen germ centers are hygienically clean when they're Clorox-clean... for Clorox is one of the world's great disinfectants, a type of disinfectant recommended by public health authorities! See directions on the label.

CLOROX
America's Favorite
BLEACH & HOUSEHOLD DISINFECTANT

Copr. 1952, Clorox Chemical Co.

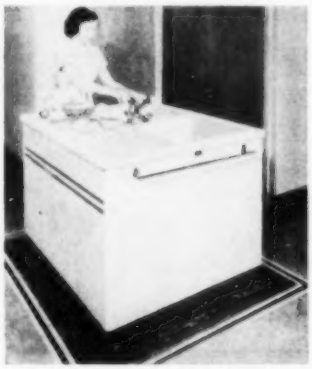
When it's CLOROX-clean... it's SAFER for Family Health!

What's new
in homemaking

A ready-built closet or closet front can easily be installed in a framed rough opening. Warpproof sliding doors have adjustable hangers with ball bearing or nylon rollers. Come in many standard sizes, including kitchen-wall units. Front

unit shown is 7'10¾" high, 5'10" wide, costs $63 plus shipping. Finishes: prime coat, natural, or enamel.—*Milo Products Corporation, Dept. 06, 1703 Susquehanna St., Harrisburg, Pennsylvania.*

A middle-of-the-room sink may help you to reorganize for a stepsaving kitchen. A special faucet makes it convenient to use the sink from all four sides. The sink is cast iron with acid-resisting enamel. It is set in enameled steel cabinet measuring



44x37½ inches. A dial which controls the drains can also be used for the garbage disposer if one is installed. See your plumbing dealer for prices and details.—*American Radiator and Standard Sanitary Corporation, Pittsburgh 30, Pennsylvania.*

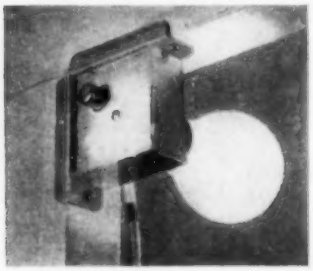
"Zip-Fix" mends zippers of all kinds without removing them from garment. Two extra sliders and complete directions are included. Sells for 89 cents at

department stores, or you can order it postpaid from *Gaylord, Department FX, Pittsburgh 6, Pennsylvania.*

Folding table top increases size of card table to seat 6 or 8 for supper or games. Made of 6-ply laminated wood fiberboard, the table top has a stain-resistant

plastic surface. Folds in half for easy storing. About $6.95 at furniture and department stores, or postpaid from *The Tuco Work Shops, Inc., Lockport, New York.*

Magic closet light—open door, it goes on; close door, it goes off! Attaches easily to any doorframe. Cord is 12 feet long.



Price: $1.89, postpaid. Order from *Fine Accessories, Decorative Cabinet Corporation, 261 Fifth Ave., New York 16, New York.*

Smart Way to be Thrifty

HAVE you ever sat down and figured out the things that really count in the cost of owning an automobile?

First, of course, comes the price you pay to buy it.

On this score, you'll soon discover that you can look a long way before you find as much power, comfort, room and smartness for the money as you find in a Buick.

Next, in the minds of lots of folks, is the question of what it costs to drive it – the miles they get from a gallon of gas.

Here too, Buick's Fireball 8 Engine has a way of getting a lot of power from each drop of fuel.

But that's not the whole story – not by a jugful. A saving of 2 miles per gallon may sound important—but the fact is, that's only $15 or $16 per year, the way most people use a car.

And a Buick can save a lot more than that because of its solid and sturdy construction—and because its Dynaflow Drive* eliminates clutch repairs, reduces wear on the tires, and strain on the whole driving mechanism.

There's one thing more that most people seldom think of—the dollars an automobile will bring when they come to turn it in for a new one. That's where the popularity of Buicks really puts money in their owners' pockets.

All of which says that buying a Buick is the smart way to be thrifty and – once you've looked this beauty over—you'll discover that it is also the thrifty way to be smart.

How about checking into this with your Buick dealer soon?

BUICK *Division of* GENERAL MOTORS

*Equipment, accessories, trim and models are subject to change without notice. *Standard on Roadmaster, optional at extra cost on other Series.*

Sure is true for '52 { WHEN BETTER AUTOMOBILES ARE BUILT **BUICK** WILL BUILD THEM

How wonderful! No more weary lifting, toting, bending, hanging!

How fine to toss away your dreary clotheslines and racks, pins and poles!

How grand to dry clothes *inside* – away from rain, snow, dirt, sun fading!

Brand new workless way to dry your clothes!

New Frigidaire Automatic Dryer dries fast, safe, sunshine-sweet —never throws steamy heat or sticky lint around the room!

Cheer, *cheer* for a brilliant new *kind* of automatic dryer that performs its time-saving, work-saving miracles anywhere in your home, upstairs or down. The Frigidaire Filtra-matic Dryer *won't* throw off objectionable moisture. *Won't* eject annoying lint to stick on moist surfaces. Because dampness and lint are trapped in Frigidaire's exclusive Filtrator!

This great new automatic dryer does its sensational job without expensive extra gadgets, without high-cost extra plumbing, or clumsy outside vents! This exciting Frigidaire beauty doesn't act at all like ordinary automatic dryers.

The only dryer with Lifetime Porcelain-finished cabinet and drum

Revolving porcelain-on-steel drum protects clothes from snagging and rust. Cabinet retains its sparkling beauty year after year. See this new kind of dryer at your Frigidaire Dealer's. His name is in the Yellow Pages of your phone book. Or, write Frigidaire Division of General Motors, Dayton 1, O. In Canada, Toronto 13, Ont.

Frigidaire reserves the right to change specifications, or discontinue models, without notice.

Frigidaire *Filtra-matic* Dryer

Plan now to see the complete Frigidaire Leisure Laundry— the Automatic Dryer, Automatic Washer and Electric Ironer

Frigidaire families live better, because Frigidaire appliances are better

Latest "know-how" in foods

Your market basket of new products, ideas, research

Spices are safe in low-salt diets. A recent report in *The Journal of the American Medical Association* points out that only dried celery flakes and parsley flakes contain enough salt to eliminate them from a low-sodium diet. This means that if you are a heart or high-blood-pressure victim who is restricted to a low-salt diet, you can pep up your food with flavorful spices.

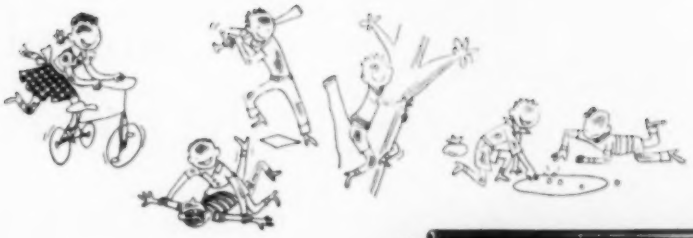
Do you know how much of other foods you would have to eat to get the calcium supplied by four glasses of milk? It would take over 7 pounds of carrots, or 39 eggs, or more than 6 pounds of cabbage. You'd have to consume 27 pounds of potatoes, or 28 oranges.

Older persons who are in a state of good nutrition will be able to withstand surgery or illness better than those whose diets have been inadequate for a long time. So if you have the responsibility of feeding an oldster, remember his diet is just as important as your own.

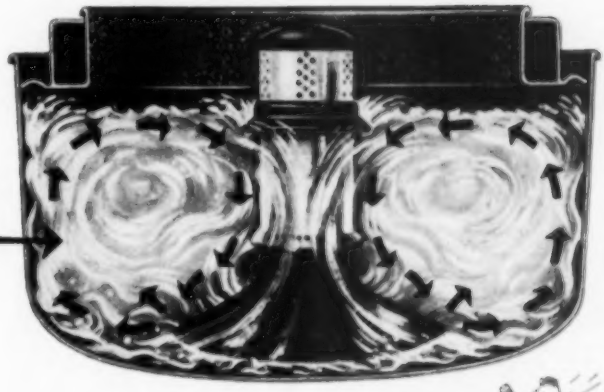
It's game time again, and when the man of the house brings home his "bag," be ready to pop the extra ducks, quail, or pheasant into your freezer. Draw and clean the bird as soon as possible. Chill the bird by hanging it at least 48 hours at a temperature just above freezing. Most game can be packaged whole, usually in polyethylene bags. Save storage space by tying legs and wings tightly to the breast. Be sure to check the game laws of your state to see if it's all right to store game.

October means apples in anybody's language. You'll get greater enjoyment from your apples this fall if you choose the best variety for your purpose. McIntosh is excellent for eating and cooking; Jonathan, for eating and cooking; Delicious, for eating; Golden Delicious, for eating and in salads; Grimes Golden, excellent all-purpose; and Rhode Island Greening, for cooking.

Comes a warning to cook those hamburgers well done. For unless you grind your own beef, the hamburger meat may contain pork. As you know, pork that isn't well cooked can give you trichinosis, or worm infection. **END**



Frigidaire's Live-Water Action



... even gets rid of "deep-down" dirt completely–quickly–automatically

A Frigidaire Automatic Washer gets "deep-down" dirt quick! Rapid currents of billowing live-water suds flood through every fiber hundreds of times, searching for and washing away the smallest speck of ground-in grime. Yet rolling Live-Water Action is so gentle (for all its thoroughness) that even rayons, nylons, woolens are perfectly safe!

Clothes are always in water—never half in, half out—another reason why Frigidaire washes so clean. How every piece sparkles, after live-water rinsing floats all dirt and suds up, away—and out! No more soap-dulled washes for you! Then Frigidaire Rapidry-Spin whirls clothes so completely damp-dry that many are ready for ironing at once.

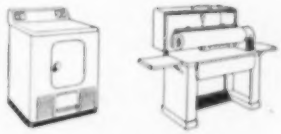
Exclusive Select-O-Dial needs just one setting. Set it—and walk away. The washer does all the work—then cleans itself and shuts off. Your hands need never touch water.

Porcelain finished cabinet and tub—a breeze to keep white and bright. Your Frigidaire Washer is equally at home in basement, kitchen, or utility room. Quiet-running, vibration-free. Never needs bolting down.

See all the Frigidaire Appliances for kitchen and laundry at your Frigidaire Dealer's next time you're in town. Or write Frigidaire Division, General Motors, Dayton 1, O.

Frigidaire reserves the right to change specifications, or discontinue models, without notice

Frigidaire
Automatic Washer



New Frigidaire Filtra-Matic Dryer filters out lint and excess moisture. Porcelain-finished cabinet and drum. Has new Dry-O-Matic Timer, Ozone Lamp, exclusive Filtrator.

Frigidaire Electric Ironer cuts ironing time in half. Exclusive Prestoe-Matic Foot Control. Open-end, 30-inch roll.

Frigidaire families *live* better because Frigidaire Appliances are better

The United States Department of Agriculture reports the investment in farming to be in excess of 111 billion dollars. Much of this is in buildings, machinery, grain, feed and livestock.

Is your share of this immense wealth properly and adequately insured? Have you checked your insurance recently? Do you have Extended Coverage as well as fire? Are machinery and livestock covered against theft?

Our agents specialize in farm insurance and our fieldmen are trained to assist them. They both can help you work out a sound insurance program.

Rely on your local America Fore Farm Agent for sound insurance protection—and for full friendly help in settling claims! To locate him, call Western Union by number and ask for Operator 25.

CONTINENTAL FIDELITY-PHENIX NIAGARA
AMERICAN EAGLE FIDELITY and CASUALTY
INSURANCE COMPANIES OF NEW YORK

America Fore
INSURANCE GROUP

LOOK FOR THIS SEAL ON YOUR POLICIES

All around the house

Here are tips to help you save some time, space, steps, work

● When rolling out baking-powder biscuits, I always roll just half the desired thickness, fold the rolled dough together, and cut. When baked this way, the biscuits come apart easily for buttering.—*Mrs. C. F., Iowa.*

● **My little girls no longer lose their hair ribbons. I use a tiny gold safety pin and secure the ribbon to the rubber band before the bow is tied. The bow conceals the pin.—*Mrs. H. B., Montana.***

● I have found an easy and inexpensive way to prepare food for my small child. I run a quart of canned fruit or vegetable through the food mill, freeze the purée in the sectional ice tray, and store the cubes in the freezer (or leave in refrigerator compartment). One cube is just right for a feeding.—*Mrs. P. H., Kansas.*

● **To make a gay picture album, I replaced the black pages in the album with bright-colored construction paper. I also used plaid material of a co-ordinated color for the album cover.—*Mrs. M. W., Oklahoma.***

● To improvise a salad-ring mold, I grease the outside of a jelly glass, place it in the center of a deep baking dish, and pour the salad mixture around the jelly glass. The hardened salad slides out easily.—*Mrs. H. C., Ohio.*

● **I combine one package of chocolate and one of butterscotch pudding mix with a quart of milk. The result is a caramel flavor that my whole family enjoys.—*Mrs. M. S., Pennsylvania.***

● My too-full medicine chest now holds bottles securely. I attached cup hooks to each side of the cabinet and stretched a heavy rubber band between the hooks. It is easy to slip the bottles out when needed.—*Mrs. E. G., New York.*

● **When ironing a garment which fades, I slip a paper cleaning bag over the ironing board. This keeps the cover spotless.—*Mrs. A. R., Pennsylvania.***

● For interlining my handmade quilts, I use a thin, white sheet blanket instead of the usual cotton batting. I find it easier to quilt and there is no trouble with the cotton wadding when the quilt is laundered.—*Mrs. C. H., West Virginia.*

● To roll a skein of yarn into a ball, loosen the screw on top of one of your lamp shades and put the skein around the shade. It will revolve as you wind. —*Mrs. A. H., Illinois.*

● Try carbonated water to remove any marks from your windows after Halloween. This works so well, takes marks off in a jiffy.—*Mrs. B. H., Indiana.*

● To keep short sheets smooth on my baby's bed, I use a pair of men's suspenders. I tuck the sheet over the mattress, then snap two of the suspender clips about a foot apart at the top of the sheet. I then stretch the suspenders lengthwise across the underside of the mattress and secure the other two clips to the foot of the sheet.—*Mrs. J. K., Nebraska.*

● As coasters for my house plants, I use colorful rubber-tile blocks. These can be found in any store which handles floor coverings. They're as decorative as they are saving on the furniture in my home. —*Mrs. L. M., Michigan.*

● In order to keep my cord clothesline hung up and out of the way, I make a good hanger from a wire clothes hanger. To make, I bend the sides of the hanger

so that the top and bottom wires extend out farther than the center. Then wrap the clothesline around the center.—*Mrs. F. B., Wisconsin.*

● For clean-cut refrigerator cookies, I use my wire cheese slicer instead of a knife.—*H. S., Pennsylvania.*

● In appliqueing a design, or when making shadow embroidery, I fasten the design to the material with a flour-and-water paste. The paste keeps the design in place and is safely removed when the article is washed.—*N. B., Wisconsin.*

● I screwed a small swing-armed towel rack inside my sink cupboard and hook brushes onto it. It's especially handy for my vegetable and scrub brushes.—*Mrs. B. P., Arkansas.*

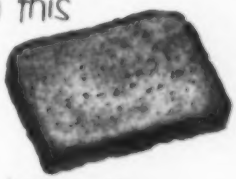
Successful Farming will pay $5 for each helpful suggestion published. We cannot return unused suggestions —Editors

RAISIN

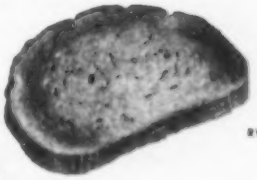
Breads of every size and shape

ENGLISH MUFFIN

are a joy to toast in this


WHOLE WHEAT

superb toaster that pops up


RYE

each piece extra high

sponsored by
Betty Crocker

General Mills
Automatic Toaster

Insulate Your Home
IN ONE AFTERNOON

WITH

ZONOLITE* Insulation

It's the easiest of all insulations to install—less than an afternoon to insulate the attic of an average house . . . it costs as low as $6.60.

You'll see the difference in your fuel bills at once—discover savings up to 40%—and you'll find a world of difference in comfort summer and winter.

See your Lumber or Building Supply Dealer now—find out how easy it is—how economical it is to insulate with the wonder fireproof mineral, Zonolite vermiculite Insulating Fill.

*Reg. T. M. Zonolite Company

Send coupon for FREE booklet.

ZONOLITE VERMICULITE INSULATION

ZONOLITE COMPANY
135 S. LaSalle St., Chicago 3, Ill.

Zonolite Company, Dept 8F-1N
135 S. LaSalle St., Chicago 3, Ill.

Please send me FREE booklet HI-20, "Your Home—Its Comfort & Protection."

Name.....

Street or RFD.....

City.....State.....

Warm, Dry Floors
IN YOUR FARM BUILDINGS

WITH

ZONOLITE* INSULATING CONCRETE

- Boost Farm Profits
- Cut Stock Losses
- Slash Feed Costs

Zonolite Insulating Concrete makes warm, dry floors—one inch insulates as well as 12-16 inches of ordinary concrete. You can do it yourself—lightweight, easy-to-mix. Makes dairy barn floors, poultry houses, hog farrowing houses, milk houses warmer and healthier for your stock. You'll discover stock losses go down—less feed is needed—production of milk and eggs increases.

Find out today about Zonolite Insulating Concrete—ask your building material dealer for full information. Send coupon for FREE booklet.

*Reg. T. M. Zonolite Company

ZONOLITE VERMICULITE AGGREGATES

ZONOLITE COMPANY
135 S. LaSalle St., Chicago 3, Ill.

Zonolite Company, Dept. 8F-1N2
135 S. LaSalle St., Chicago 3, Ill.

Please send me, at once, the new 12-page Zonolite Farm Booklet F-1, "Farm Insulation with Double Efficiency."

Name.....

Street or RFD.....

City.....State.....

AT LUMBER & BUILDING SUPPLY DEALERS

WHAT WAS NEW IN FARMING

50 Years Ago

A half century of progress in farm life! That's what *Successful Farming* has portrayed during its first 50 years. The following items from the magazine's early issues will give you an interesting glimpse of farm life shortly after the turn of the century.

After horses have been galled and the hair begins to grow again, rub the spots with fat bacon several times and the new hair will be the same color as the old. Without the aid of the fat, it is liable to come in white, thus disfiguring the appearance of a dark horse.

Ladies' hats of the early 1900's were advertised by the seller as "exact copies of exquisite patterns especially designed for us by famous modistes of Paris and London." (Men: Those bargain prices would look good today, don't you think?) These fancy numbers were described as "bewitchingly chic and pretty, have distinct city style, and possess the fetching dainty effect found only in imported millinery."

When tablecloths are beginning to wear out in the folds, it is a good plan to cut 2 or 3 inches off one end and one side and rehem them. This will change the places of the folds and will add new life to the cloth.

The wise farmer will learn all he can this winter from farmers' institutes, bulletins, and books about forage crops and catch crops that help out in drouth times and fill the barns so full that they do not become empty before stock food grows again.

A good holiday cake: Beat 4 ounces of butter, 3 ounces of sugar, and the yolks of 4 eggs together. Add 4 ounces of flour, the grated rind of half a lemon, a teaspoonful of rose water, and the beaten whites of the eggs. Fill fancy cake molds with the mixture; sprinkle the tops with chopped almonds and powdered sugar. Set in a moderate oven for 40 minutes.

If your land needs a change or rest, don't grow millet on it, or seed to timothy. If soil is weak and needs both rest and building up, use Nature's great restorer—clover.

Don't be narrow-minded; it leads to ruts; be willing to be convinced. A broad tire will carry a heavy load safely where a narrow one will sink under one lighter.

Labor-saving machinery was on the way in 1902, and this endless-apron manure spreader outdid 15 men with forks, according to the advertiser. Its selling points included "light draft, simplicity, strength, and durability," with a pair of hickory doubletrees given as a bonus

Race-track fans of that day were offered colored pictures of these three harness horses by a stock-food firm. The world-famed Dan Patch, with record of 1:56¼, was "valued at $150,000, as he promises to be one of the greatest sires." He was!

Oh! The WONDERFUL things

Jell-O Puddings and Pie Fillings can do...

Do you still make your lemon pies the long, drawn-out way? No need to! You can make a homemade-tasting pie *in a fraction of your usual time* with the new Jell-O Lemon Pudding and Pie Filling! In fact, your pie will be so good, we guarantee its *fresh-lemon* flavor —or you can have your pennies back.

How do you like your chocolate pie? Deep, dark and delicious? That's the way Jell-O Chocolate Pudding and Pie Filling makes 'em. Just add milk and cook for 5 minutes. And how you'll love *this* chocolate flavor! It's made from an exclusive blend of world-famous Walter Baker Chocolate.

Even the fussiest of husbands beam when you march in with a coconut cream pie! With the new Jell-O Coconut Cream Pudding and Pie Filling this dreamy treat is quick, *quick, quick!* Even shredded coconut is right in the mix! Make a handsome pie like this today!

JELL-O Puddings & Pie Fillings

NOW 5 FLAVORS—VANILLA, CHOCOLATE, BUTTERSCOTCH, LEMON, COCONUT CREAM

JELL-O IS A REGISTERED TRADE-MARK OF GENERAL FOODS CORP.

Shown above: NO. 5412, GRAY ON VENETIAN RED *approx.* $9.75 *per sq. yd.*

Argosy –heavily textured broadloom
... and look at the price!

Naturally you demand the most for your carpet dollar–and the very best decorative value too! ARGOSY broadloom gives you both–rich texture and a budget price. The colors are glorious and the whole effect is of a luxury far beyond the Argosy price-tag. Your favorite floorcovering store is eager to show you these new Argosy carpets...they're such a wonderful buy and will give you pleasure for many years.

Women with a sense of style prefer

FIRTH
broadlooms

FIRTH

THE FIRTH CARPET COMPANY, Dept. 39
295 Fifth Avenue, New York 16, N. Y.
25¢ in coin enclosed for Decorating Book

NAME _____
(Please print)

ADDRESS _____

CITY _____ ZONE _____ STATE _____

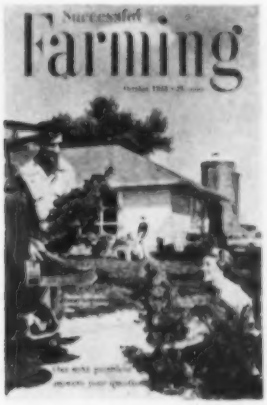
Swatches at left: NO. 5406, GRAY ON GREEN
NO. 5407, BEIGE ON GREEN
Dress from Bergdorf-Goodman

SEND THIS COUPON today for the exciting booklet, "How to Achieve Charm in Decorating Your Home"–64 pages of stimulating ideas for every type of home. One of the most inspirational yet practical decorating booklets ever published. Yours now for only 25¢ in coin.

This month, **Successful Farming** *is a vigorous 50 years old. We are proud and happy to have shared with you—to our mutual benefit—*

1902

1952



Farming's best half century

"Drive slowly, you are crossing a billion years of the earth's history," reads a sign in our Western mountains. On the sides of those mountains, thrust up from mighty depths, can be clearly seen layers of rock representing the earth's major periods of development.

It is with somewhat the same feeling—and with proper humility—that I sometimes pause before the library shelf where stand 50 years of bound volumes of *Successful Farming*. This October issue is the six hundredth monthly appearance of *Successful Farming* in the mailboxes of American families. Those 600 issues reflect the most significant periods in the development of agriculture that the world has ever known.

Through their yellowing pages can be traced the first attempts to apply mechanical power on a massive scale. The early work of experiment stations is there. As science advanced, the country's rising tide of population was assured ample supplies of good food. And, significantly, agriculture became inseparably linked with commerce and industry—because application of science rests upon the materials delivered by these segments of the economy.

Through the major part of the file runs the story of Agricultural Extension work, which supplemented the job of the agricultural press.

Men have farmed to live—though some have given precious little thought to living. Most significant development, I think, traced through those volumes of *Successful Farming*, is the growing concern for a good life on the land.

In the latest bound volumes on the *Successful Farming* shelf may be clearly seen, in beautiful four-color printing, fine farm homes furnished and decorated in the best taste available to any homemaker. The church, the school, health, and good roads are topics which round out the evidence of a sharply rising standard of farm living.

Successful Farming is 50 years old with this October issue. It has shared prosperity with you who farmed the land. Issues were too thick in one of the early years to bind in one volume and so had to be bound in two, of six months each. We have shared your adversity, too—the shelf has some very thin volumes.

Successful Farming has tried faithfully—and shall continue with equal zeal—to give you the information you need to make your own decisions. We have sometimes expressed our own opinions, but always in such language that you could see that you were getting opinions.

Great and significant changes will come to you folks on our farms in the next 25 years. With vast resources, and equipment linked to science, the world's best farmers must certainly achieve great things in their contributions to society and in their own advancement.

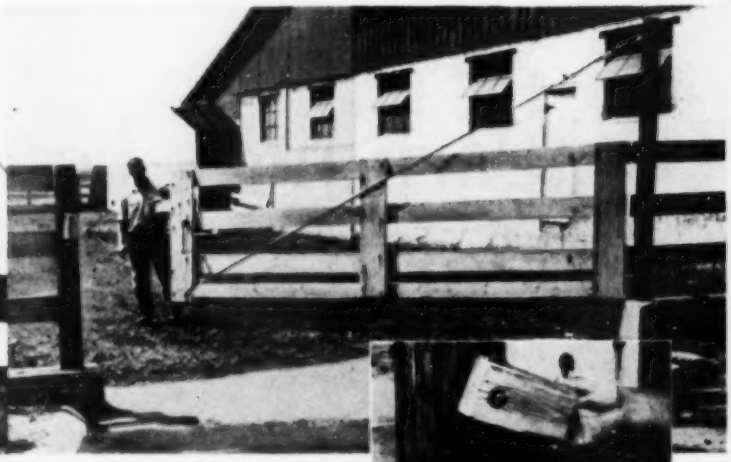
Forgive me if I seem to be approaching the emotional level as I pause before that shelf of books. You pause, as does the motorist in the presence of the earth's vast history, and reflect upon what has come to farm life in 50 years. Talk it over with your family and friends. Some emotion may do you good, if it leads to inspiration.

All those who have made those records of agriculture in the 50 volumes of *Successful Farming* believed thoroughly in the future of the farm and farm folks. Those of us who carry on know great changes may come. But we believe steadfastly in the future of the family farm and all those who elect to spend their lives on it.

Dave Fox
EDITOR

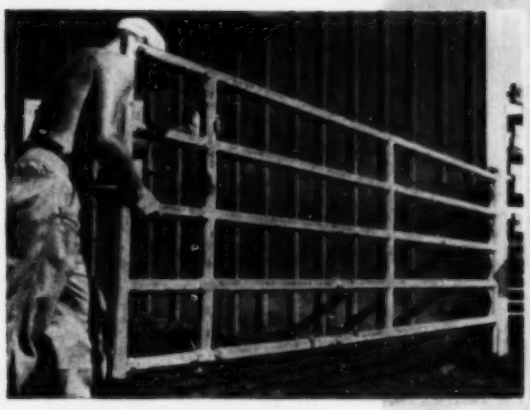
Gates, gates, gates

Handy, well-built, and properly located gates save many steps on a livestock farm. They should be easy to handle and strong. *Successful Farming* brings you several gates—each for a certain need. Study the location, then pick a gate to fill that need

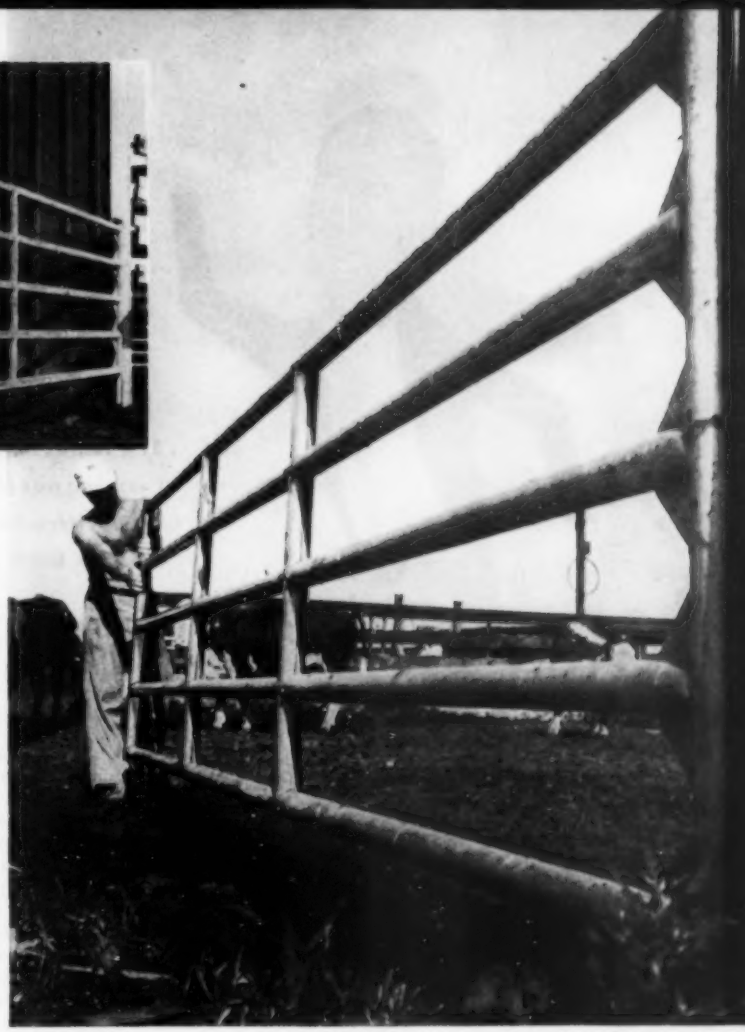


Sturdy, no-sag feedlot gate is styled after stockyard models by Edward Van Bogaert, Kane County, Illinois. A turnbuckle, attached to the upper end of a guy cable, enables him to keep sag out of gate. The gate can be raised or lowered by tightening or loosening the turnbuckle. A foolproof latch keeps livestock from opening the latch. The concrete feeding floor extends through the gate, preventing the animals from churning up mudholes in gateway

Four multiple-combination gates are placed at intersection of four pastures and lots on the D. Howard Doane farm, McCredie, Missouri. According to Prof. Gordon Nance, University of Missouri, the gates have 24 possible combinations. Cattle can be easily shifted from any one pasture to another. Creosoted lumber prevents rotting and keeps livestock from eating the wood

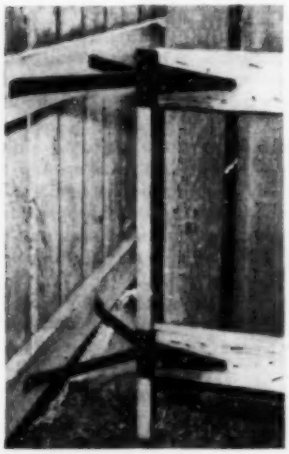


Telescoping gate is handy when shifting cattle around feedlots, says Earl Dauberman, Kane County, Illinois. Gate can be used in openings of different widths. Length varies from 8 to 16 feet

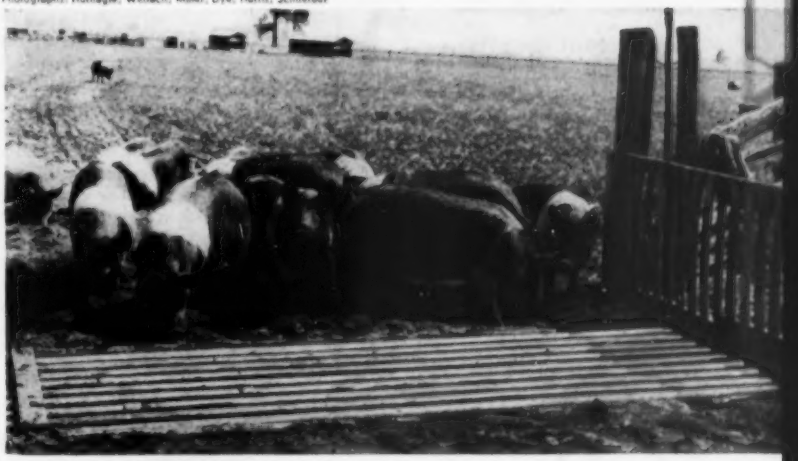


Double-swing gates can be held together with device shown above. Cut length of pipe to saddle smaller pipes of gates. Hinge device on one end so it can be folded back when gates are open

Photographs: Hufnagle, Wettach, Miller, Dye, Harris, Schneider



Bracket arrangement, bolted to fence, supports lot partition on cement feeding floor for Elmer Denkman, Iowa



Portable hog and cattle guard saves opening and closing gates on the Marsh Foundation farm, Van Wert, Ohio. Guard is 53 inches wide, 12 feet long, and can easily be moved. Two-inch pipes are 3 inches apart. Supporting beams are put where wheels hit

More on page 62

WHICH

You readers asked the questions.* Successful Farming *put them to the candidates. And in the articles below, you will read the frank answers both men give exclusively to you

Adlai Stevenson **answers the five important questions *Successful Farming* readers asked**

In 1948, Harry Truman, battle-hardened veteran of rough-and-tumble politics for a quarter century, squeaked out a victory in the presidential election in Illinois by a margin of 33,000 votes.

In the same year in the same state, Adlai Stevenson, an amateur running for his first public office, won the post of governor by a margin of 572,000 votes, largest in the history of the state, and 17 times larger than the margin the president himself received.

Politically, that spelled pretty strong magic. Stevenson's star shot high in the sky and soared him to the Democratic nomination for the presidency less than four years later.

He isn't the kind of man you quite expect to find in politics. His talk is quiet, scholarly, cultured. He speaks with a frankness which would make most politicians shudder. He seems genuinely concerned with the people, first, and his party, second.

He is not the all-out win-at-any-cost type of professional politician. He is a very reasonable man. He puts good government and good leadership ahead of partisan success. He says, "Better we lost the elections" (what a phrase for a politician to say right out in public) "than mislead or misgovern the people." And government, he tells the citizens, "is your business—I'll manage my part of it as well and as thriftily as I can, but you're the stockholders and you're in charge."

He has shown tremendous ability and success in domestic government. Illinois was one of our worst-governed states; he made it one of the best-governed. He won the support of a Republican Legislature for a program for the people, not politics. He fought corruption in the state to its knees, raised state salaries, and greatly increased state services without raising taxes.

The man is almost fanatically devoted to his job. When he was elected, he promised to "give to the task every ounce of my energy, time, and heart." [*Turn to page 158*

A list of prizewinners appears on page 162

MAN?

Candidates interviewed by Gordon Sabine

Dwight D. Eisenhower gives his answers to the timely questions from our readers

The most politically charming thing about Dwight D. "Ike" Eisenhower is that he doesn't speak, act, or particularly look like a politician. And yet he has enough ballot-box "it" to blitz a couple of thousand battle-hardened delegates to the Republican National Convention into making him their nominee for president of the United States this year.

He did this with only the most general kind of a platform or program. He did this despite a lack of knowledge of American domestic affairs that made him answer, "I don't know," to more questions on more different subjects than any other candidate ever has. What the general *did* have to offer was a hope for a better world and a lot of down-to-earth faith in America and Americans.

What sort of president would he make? Obviously he has much to learn about problems here at home (he's been in this country comparatively little the past 12 years). But his record shows he learns quickly and well, and it's certain he'll have the best teachers the Republican Party can find.

He's convinced "the future of this republic is in the hands of the American voter," who ought to "stop shrugging off politics as only politicians' business," who ought to make himself heard and "stop banking on American luck to get us good government and good policy."

He's struck many sensitive notes in his political beliefs. For instance, he thinks our federal government in Washington has too much power, is too big, attempts to run our personal and business affairs too much.

Politically, he's a middle-of-the-roader, neither very conservative nor very liberal.

He's been in uniform most of his life, but believes the military should be subordinate to civilians in government. As army chief of staff, he strongly supported compulsory military training, *but* the real road toward universal and enduring peace, Ike maintains, must start with organized international cooperation and mutual understanding and then go forward to progressive [*Turn to page 160*]

Drawing: Jan Balet

Is your cattle feeding this easy?

By Vernon Schneider

Gravity and conveyers do most of the feed handling for Earl Dauberman, cattle feeder in Kane County, Illinois. A system of conveyers and overhead bins does the trick. Using these, Dauberman turns out about 450 cattle each year with a minimum amount of labor.

Secret to his easy feed-handling system is overhead gravity-flow bins. A bucket-type conveyer elevates the three ingredients (ear corn, shelled corn, and barley) from their separate bins to three overhead holding bins. From these bins, the ingredients can be spouted directly into the mill. The feeding mixture runs about $\frac{2}{3}$ corn and $\frac{1}{3}$ barley and is mixed as it goes through the mill. A 36-percent protein steer supplement also is fed.

From the hammer mill, the feed mixture is blown either directly into two self-feeders just outside the granary or into overhead holding bins. Again, it's gravity which fills the wagons from these bins. The protein supplement is delivered in bulk and also stored in an overhead bin.

1. Ear corn, shelled corn, and barley can be moved from bins in granary to overhead holding bins by horizontal and vertical conveyers

3. Baffle plate in pipe can be adjusted to direct the ground feed into a feeder outside the granary or to the overhead holding bins

Photographs: Hufnagle, Schneider

5. Mixed feed also can be spouted directly to overhead holding bins. Movable spout allows him to direct the feed into proper bin

Pease

Grading assures customer of quality eggs bring 14-to-20-cent premium

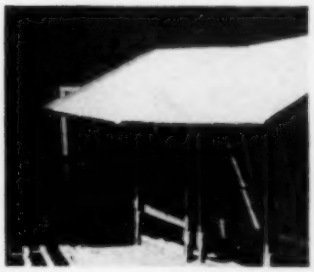
They sell eggs

Splitting egg profits with an egg buyer and several processors doesn't appeal to Mr. and Mrs. Rudolph Krasny, Shawnee County, Kansas. They're getting the full amount paid by the customer by selling eggs directly to him.

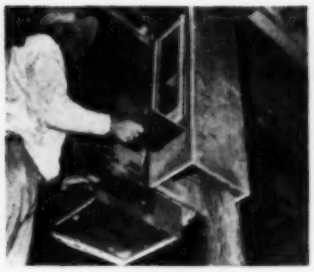
First of all, the Krasnys found a steady, reliable outlet. Three Topeka hospitals, a high school, and a large cafeteria take care of the 21 cases produced each week.

Get 14 to 20 cents over current receipts. For the extra trouble, the Krasnys not only get the full price paid by the customer but also an extra premium for quality

2. Ingredients are spouted directly into grinder from overhead bins. The feed is mixed as it is ground



4. Ground feed is fed in these two 14-foot feeders which hold a week's supply of feed for 150 beef cattle



6. Glass-front chute, using two slides, allows him to meter out the supplement in 100-pound batches

7. Gravity moves mixed ground feed from overhead holding bin to wagon below. Flow is regulated with levers. A layer of grass silage goes on bottom of the wagon, then ground corn and barley, and last a layer of protein supplement. The three are mixed as they are shifted to bunk. END

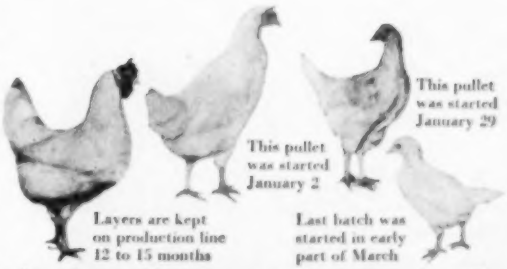
for what they're worth

By Earl Beery

eggs. At present, they're getting about 5 cents per dozen above Grade A prices in Kansas City and from 14 to 20 cents over local current receipts.

Krasny's big problem is to keep his hens producing at a steady clip, assuring his customers of a constant supply.

Increased flock size. During the past seven years, the flock has been increased from 300 to over 2,000 hens. This was necessary to supply the increasing demand and to get the volume up to a point where it is profitable. "You can't make money with a small flock," [*Turn to page 126*



Several ages of birds assure steady, year-round supply

Look what legumes can do for you

Every day we hear of phenomenal yield increases due to fertilizers — here's one we can chalk up to alfalfa. Soil tilth and organic matter made the difference

By George D. Johnson

The pickers in the photograph at right have just made four identical rounds in the field. But one turned left, the other right, from the center. The difference in the two loads is due almost 100 percent to soil structure and organic matter.

Lester Jacobs, Whiteside County, Illinois, didn't know he was setting up a perfect demonstration plot when he plowed the east half of a new field of alfalfa three years ago. The two following years, the west side still stood in alfalfa. On the east, Jacobs planted well-fertilized corn. Then, in 1951, he put the whole field in corn. He planted all to the same hybrid, on the same day, at about 12,000 stalks per acre. The soil was medium-textured bottom land, low in potash.

Jacobs could see a difference in the corn the day it came up. Despite a side-dressing of nitrogen fertilizer, the half which had already been two years in corn yielded 54½ bushels per acre. The side previously in alfalfa yielded a presentable 87 bushels.

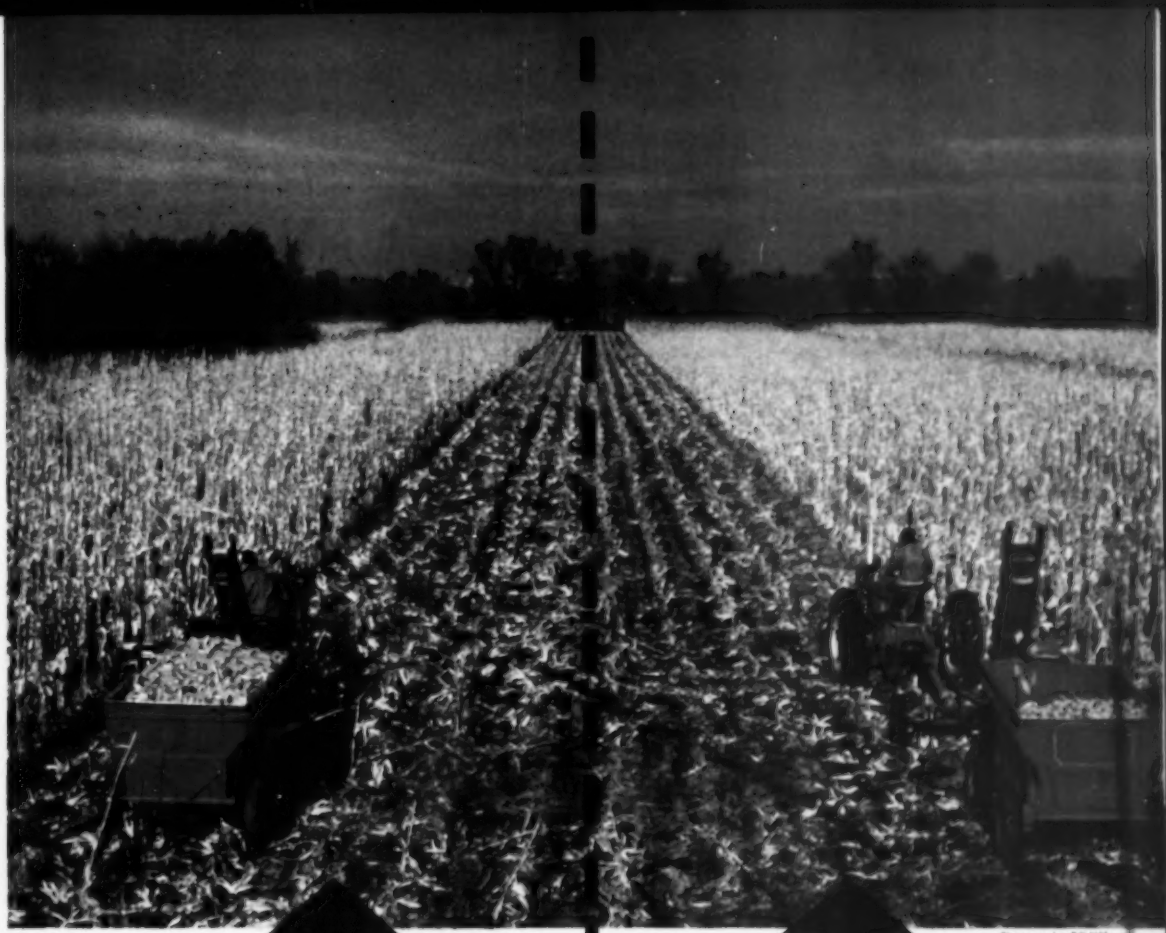
The startling thing is that the three-years-corn side of the field had had remarkably good treatment. The soil was tested. Seven or 8 tons of manure was applied per acre each year. And 450 pounds of high-analysis fertilizer was applied, in two years.

In 1951, Jacobs applied 150 pounds of muriate of potash before planting, and hill-dropped 100 pounds of an especially mixed 4-14-30, at planting, on the whole field. The corn on the half which had been in alfalfa came up faster and was more vigorous. To boost the other side, he gave it an extra 100 pounds of ammonium nitrate when it was knee high.

"I tried to stretch it but it wouldn't stretch," says Jacobs, in speaking of the yield on the three-years-corn side of the field. "The tilth just went to pieces on that side. I could tell it when I plowed. The alfalfa gave the corn a shot of nitrogen, but I nitrated the other half. *It was the difference in structure that showed up.*"

The unearthed roots bore out this testimony. The average hill (three stalks) on the alfalfa side had twice the root system—and three good-sized ears and one or two nubbins. The other side had one fair-to-middling ear per stalk. If we use the University of Missouri figure that 40 bushels per acre are needed before one begins making a profit, it leaves 14½ bushels' profit from the one side *and 47 following two years of alfalfa!*

This photograph was taken July 19, 1951, at the point where the two sides of the field join. Farm Adviser F. H. Shuman (left) stands on the alfalfa side, Jacobs in the third-year corn



Photographs: Bill Wilson

Following alfalfa—87 bushels of corn per acre. Ears and roots are from typical three-stalk hill below

Following two years of corn—54½ bushels. Ears and roots are from average hill this side of the field

This Modern room is decorated with a large tropical floral pattern and a plaid tied together by use of the same colors throughout

The subtle texture of the carpet in this living room makes good background for small-checked draperies, larger-patterned chair

A good example of pattern balance. One pattern used all over room with draperies massed on one side and sofa on the other

Second of a series, Recipes for Good Decorating

How to mix pattern and plain

By Joan B. Scovel

Last month we gave you a basic recipe to use when planning a color scheme for your home. This month we want to tell you how to choose and mix patterns to go with those color schemes. Pattern, like color, can work wonders with a room. It can add charm and personality, give warmth and liveliness, or take an old room out of the past and bring it up to date. But, for best results in your decorating, patterns should be mixed carefully with plain colors to avoid too much confusion or too much monotony in a room.

Pattern should do two things for your room. First, it should tie your color scheme together by repeating and accenting the colors you have used. And, second, it should reflect the style of your furnishings. For instance, furniture with Modern lines calls for large, bold designs, while Early American pieces are more at home with small calicolike prints. If your furniture is a collection of all styles, choose a pattern that will blend them together into one style.

"How do you choose patterns that are right?", "How do you mix them together?", and "How much pattern can you use in one room?" These are just a few of the questions asked us by homemakers all over the country. With the wonderful selection of merchandise in the stores today, many homemakers find it is hard to make up their minds about which patterns they like best and which are right for their homes. To help you as a homemaker, *Successful Farming* has developed and tested a recipe which will enable you to choose your patterns for a pattern-perfect room. The recipe is based on the questions you've asked—here are the answers:

Q *How many different patterns can be used together in the same room without its becoming too confused?*

A One pattern used in several places in your room is always safest and oftentimes the most attractive. Like color, it should be distributed around your room and not all put on one side of the room. Two patterns in one room are the maximum that can be used without a room's becoming confusing. Textured and tweedy fabrics and papers can substitute for a pattern, or can be successfully combined with one or two patterns. If you are tired of flowers, stripes, and geometric prints, investigate the various textures that are available. Use them with a pattern of another type, or use two of them together.

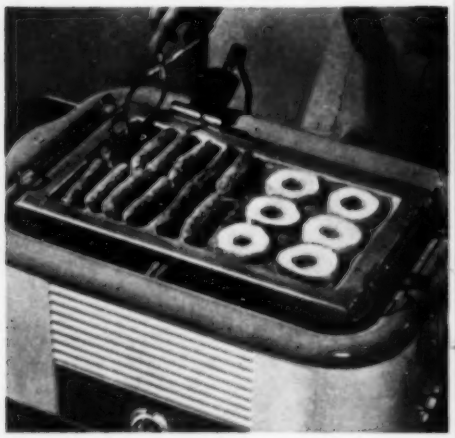
When you are deciding where you want to use pattern in your room, be especially cautious in choosing wallpapers. Paper covers such a great area that in most cases everything else in the room should be kept in a solid color, especially if you're choosing a large pattern. If you're looking at companion papers, remember they were designed and intended for adjoining rooms, and not to be put together in one room.

Q *What things must be considered when combining patterns together in a room?*

A The carefully planned room takes three things into consideration. First one to think about is the scale of the pattern in relation to your furniture, your room, and to the other patterns in the room. [*Turn to page 72*

Charming Early American dining room uses large floral on chair seats and draperies, combined with geometric print on walls. Hooked rug adds pleasing texture

Save work with a roaster



A griddle and broiler. A handy broiler-griddle accessory makes your roaster the complete table range. Bring it to the table for quick sandwiches, bacon and eggs, griddle cakes, and broiled foods

◀ **A second oven.** When your oven is bursting at the seams, your electric roaster takes care of the overflow. For any meal that requires two oven temperatures, use both your electric roaster and your oven

Make your cooking easier

For quantity cooking. Perhaps you've promised barbecued ribs for the church supper. No need to interrupt your regular kitchen routine. Just prepare the ribs in your electric roaster and use the stove for the family's meals

By Mary Collum and Ann Gloe

It's a poor home manager who would hire a full-time maid, set her in a rocker in a corner of the kitchen, and leave her idle for days and weeks on end. Yet many homemakers today are doing just that with their newest full-time cooking appliance, the electric roaster.

Here is an everyday appliance, every bit as useful as your stove and refrigerator. Take it out of seclusion and let it earn its keep.

First, you can use your electric roaster for complete oven meals any day in the week. You'll cut way down on aggravating heat in the kitchen, and eliminate the bother of basting as you roast. You can also use your roaster as a second oven when you're fixing two things that need different baking times. Put the roast in the oven, the pies in the roaster. Or use it as a broiler and griddle. [*Turn to page 102*

Save time with a pressure pan

Cooked in the pressure pan, this Veal-bird Dinner is done in 33 minutes. Takes just 1 hour less than start-from-scratch veal birds. When cooked this way, the veal birds, potatoes, and carrots retain all of their own good flavors

◀ A complete meal cooked in 15 minutes. There is just no quicker way to serve a tempting meal than with a pressure cooker. Pork chops, apples, sweet potatoes for fall meals

Imagine! A pot roast cooked in about 45 minutes. That saves about 2 hours of the usual cooking time. Time that can be spent fixing a fancy dessert or making an extra-special salad. Meat and vegetables taste good, too

If you've ever thought wistfully about taking a vacation from cooking, you'll find a pressure saucepan is the next-best thing. It's a real boon to cooking ease, because it gives you a chance to escape from those long hours in front of the stove.

With a pressure saucepan, you can fix complete meals in 30 minutes or less, cutting as much as 3 hours off your cooking schedule. Hours which will give you more time to be with the family, to rest, to read, to do as you like.

A pressure pan is thrifty in other ways, too. It saves fuel, because you cook for a shorter time on low-burner heat. It's economical because you can cook the tougher, less expensive cuts of meat until they are perfectly tender. Properly used (see list following), a pressure pan helps retain natural food value. As only a small amount of water is used, the vitamins don't soak out. [*Turn to page 106*

What you should know about

Livestock minerals

By S. E. Smith
Cornell University

There may still be some feedlot questions about some of the new ingredients in livestock rations—but there's no question about minerals. Your livestock need them, there's no doubt about it. So, it's to your advantage to know as much about minerals as possible.

Mineral "know-how" will keep you from feeding needlessly high amounts of required minerals, and will prevent the feeding of minerals that livestock can get along without. The drawing at the right lists all the minerals known to be needed by livestock. The drawing also shows some of the places these minerals are used within the animal's body. Although a cow was used in the drawing, the uses, deficiency symptoms, and sources of minerals shown apply to all types of livestock.

It's now well known that farm animals need 13 mineral elements in their feed. These minerals are divided into two groups—the common minerals and the trace minerals. The common minerals are required in relatively large amounts—ounces or fractions of an ounce per head daily. The trace minerals are required in very small amounts and are measured in milligrams, which are approximately 1/28,000 of an ounce each.

First, let's look into the common minerals in livestock feeding. Potassium, sulfur, and probably magnesium are present in large amounts in any kind of ordinary ration, so you don't have to worry about adding them. This leaves sodium, chlorine, phosphorus, and calcium which, under some conditions, are not present in sufficient quantity in ordinary rations. You have to know how much and when to add these to stock rations.

Sodium and chlorine

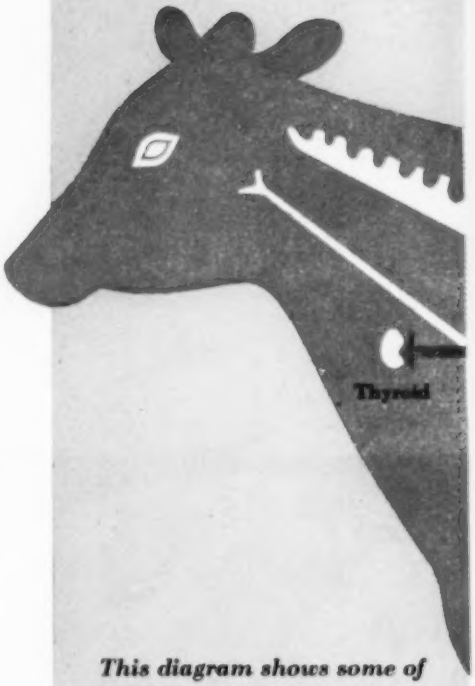
Sodium and chlorine are usually added to a livestock ration in the form of ordinary table salt. For plant-eating animals, salt is almost always deficient in otherwise good rations. For those animals fed milk, meat scraps, tankage, or fish meal, the need for additional salt is less because animal products are good to rich sources of salt.

Just what specific function salt has in the animal body is still not settled. In a general way, salt is needed to maintain a proper balance of water between the cells and the fluids of the body. Salt helps keep the acid and alkaline materials of the body in proper ratio. It also aids in muscular activities.

More specifically, the chlorine of salt [*Turn to page 148*

TRACE MINERALS

Where it comes from:.....
Organs of special use:.....
Deficiency symptoms:.....



This diagram shows some of the animal organs that use minerals. It explains where these minerals come from, what happens without them

COMMON MINERALS

Where it comes from:.....
Organs of special use:.....
Deficiency symptoms:.....

Iodine	Copper	Iron	Zinc	Cobalt	Manganese
Iodized salt	Oil and liver meal	Green feed, tankage	Many feeds	Oil meal, legumes	Forages, oil meal
Thyroid gland	Blood, heart	Blood, liver	Lungs	Blood	Bones
Goiter, weak young	Anemia	Anemia, difficult breathing	Unknown for livestock	Anemia, poor appetite	Crooked bones

Magnesium	Potassium	Sodium	Chlorine	Calcium	Phosphorus	Sulfur
Most feeds	Forage plants	Salt, milk products	Common salt	Bonemeal, tankage	Bonemeal, tankage	Protein supplement
Bones	Body cells, heart	Blood	True stomach	Bones, udder	Udder, muscle, bones	Hair, hoofs
Convulsions	Unknown for livestock	Salt hunger	Salt hunger	Rickets	Rickets, eat dirt	Unknown for livestock

Drawing, Ethel

Good management–

key to success with substitute

Taking the pigs from the sow can be done at birth or up to 2 weeks later. When you do it will depend upon equipment and the pigs themselves

Teaching the pigs to drink can be done by ▶ pushing their noses into the milk. Some farmers say the pigs will begin drinking by themselves

Pen should be equipped with a heat lamp, creep feeder, water supply, and a partitioned trough with space for all pigs to drink at once

sow's milk

By Dick Hanson

It's difficult to find one livestock-raising program that will fit two different farms. And if the farms are hog farms, it's next to impossible. A county agent once made that statement. Now, the use of substitute sow's milk makes him something of a prophet.

When substitute sow's milk first came along, some farmers figured it was the all-time answer to their pig-raising problems. And, for some hogmen, it has been almost that. But, like a cantankerous old mule, it may not work for everybody.

Many farmers tried raising pigs on the substitute milk last spring. Results varied tremendously. The first two farmers I talked with who had used the milk gave a discouraging report. But, as was true of every farmer contacted, they were convinced the idea was good. Also, every farmer I talked with, regardless of past results with the substitute milk, *was planning to use the milk again.*

Many farmers thought that poor results weren't caused by the substitute milk itself. They blamed much of their trouble *on their own management practices.*

Management—not only *good* management but a different kind than we've needed in the past—seems to be the answer to success with substitute sow's milk.

"I always figured a pig wouldn't overeat. But I was wrong," Raymond Taets, Annawan, Illinois, told me. "I found out the hard way, too. I put 70 pigs on substitute milk and lost about 20 before I discovered they were getting too much milk.

"I started out by self-feeding the milk in ordinary troughs. This didn't work. The pigs scoured badly and I lost about 20. Then I switched to hand-feeding at 4-hour intervals during the day and once during the night. After I started hand-feeding, I didn't lose another pig. I reduced the number of feedings per day as the pigs got older," Raymond continued.

Raymond took his pigs away from the sows on the third day. But he thinks the shock of separating the sow and the pigs would be less if the pigs were left with the sow until they were a week to 10 days old. The first week, Raymond fed 1 gallon of the milk for every 10 pigs. Then he increased the amount by 1 gallon every week up to 6 weeks when the pigs were weaned. The pigs gained well. When I visited the farm, the pigs were 3½ months old and weighed about 90 pounds.

Raymond probably wouldn't have tried substitute sow's milk except for the fact that he—like many other farmers—didn't have room for both the sows and pigs. The pigs were put in a small [*Turn to page 84*

Good sanitation practices begin when you enter the hog house. Building a disinfectant pool in the doorway of the hog house will help prevent carrying disease into the pig-housing area

Keeping the pens dry is a problem when pigs are fed substitute sow's milk. Frequent and liberal use of bedding is necessary in order to prevent the pigs from getting chilled and scouring

Photographs: Pease

Keeping utensils clean is a major part of the labor connected with substitute-milk feeding. The utensils should be cleaned after every feeding for the first week or two pigs are on milk

Chuck cuts

give you variety, economy, and good eating

By Susan Menne

There's good eating "up front" on the steer. That means juicy pot roasts, succulent stew meat, and fork-tender steaks from the chuck.

Did you know that one-fourth of all the beef that reaches America's table is from the shoulder cut called *chuck?* Whether you produce the beef yourself or select it across a meat counter, you'll want to know how to identify cuts of chuck and how to prepare them.

Check the location of the chuck on the pint-sized steer below. It has three parts—blade, arm, and neck.

Blade—sold as blade steaks and blade pot roasts.

Arm—cut into arm steaks and pot roasts.

Neck—made into ground beef or stew meat. One section of the neck, located right next to the arm, is called the English or Boston cut. It can be ground, cut up for stew, or sold as a pot roast.

Chuck is one of the less tender cuts of beef. Most grades need long, slow cooking with moist heat. That means braising or stewing. However, Prime cuts of blade and arm are tender enough for roasting and pan-frying.

U. S. Prime is tops in government-graded beef. It has a thick covering of firm, white fat. The lean is pink or bright cherry red, firm, and well marbled. Some reaches the retail market, and may find its way to your table.

U. S. Choice lacks the finish and often the quality and conformation required for Prime beef. The lean is darker and usually contains some, but not much, marbling. This is the grade that will most often meet your requirements for flavor, tenderness, and economy.

U. S. Good lacks the conformation and quality, and especially the finish, of the two better grades. The fat is yellow and usually thin. Often the lean is dark and soft, with no marbling. It is not as rich in flavor nor as tender as higher-grade meat.

U. S. Commercial consists mostly of beef from mature cows. It is economical and equal in nutritive value to beef of the higher grades. The fat covering is usually thin and the cut surface may show practically no marbling at all.

U. S. Utility is the lowest grade of beef sold in most markets. The lean is often dark, coarse, and stringy.

Chuck recipes on page 114

Chuck cuts and where they come from

Top left: Lemon-barbecued Pot Roast, served with golden, oven-browned spuds

Top right: Stew of Distinction, featuring Tomato Dumplings to highlight the platter

Bottom left: Italian Steak, here with its traditional trimmings—spaghetti, cheese

Bottom right: Beef Pin Wheels, a picnic treat of meat and vegetables all in one

Drawing: Hiser. Color photograph: Snook

Only YELLOW DELRICH Margarine

Sweet WHOLE MILK

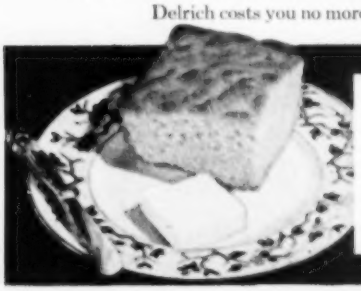
COMPARE THESE DELRICH INGREDIENTS

Sweet Whole Milk 16%
Refined Cottonseed Oil 80%
Other Ingredients (listed on carton) 4%

Delrich is made of:
HARDENED COTTONSEED OIL, WHOLE MILK, SALT, SODIUM SULFOACETATE DERIVATIVES OF MONOGLYCERIDES, LECITHIN, 15000 U.S.P. UNITS VITAMIN A PER POUND, SODIUM BENZOATE 0.10%, ADDED AS A PRESERVATIVE. ARTIFICIALLY FLAVORED AND COLORED. 2 OZS. SUPPLY 46% OF THE MINIMUM ADULT DAILY REQUIREMENT OF VITAMIN A.

TRIED OTHERS? NOW TRY—
THE DELRICH TASTE!

Delrich Margarine brings you what we honestly believe is the finest, most delicious margarine ever made. Yet—
Delrich costs you no more than ordinary margarines!



Today—Surprise Your Family with piping hot, crusty, golden-good corn bread! Use easy-blending Delrich as a flavor shortening *in* your favorite corn bread recipe ... serve Delrich as a delicious, nutritious spread *on* it! Taste how sweet and fresh a margarine can be ... taste Delrich!

Tips for the cook

Ideas that add sparkle to meals and make cooking easier, quicker

By Martha Quinn

Golden-glazed sweet potatoes make a noble contribution to fall dinners that feature ham or poultry. This recipe is extra good, takes just seconds to fix, and bakes in 20 short minutes. Cook, peel, and slice sweet potatoes or yams. Spread generously with orange marmalade. Arrange in a greased baking dish and bake at 350° (moderate) for 20 minutes.

Photographs: Photography, Inc.

A pork-chop casserole you'll want to remember for a busy day goes like this: Brown chops on both sides and put them in a shallow baking dish. Spoon a 1-pound, 5-ounce can of pork and beans around the chops. Pour 3 tablespoons maple syrup over all. Bake at 350° for 1 to 1¼ hours. Baste occasionally.

An inexpensive and tasty way to make a meal more substantial is to include a hot bread on the menu. Cheese-topped biscuits are one of the least fussy to make, and always meet with hearty approval. Cream 2 tablespoons softened butter or margarine. Work in 1 cup grated sharp cheese and ½ teaspoon prepared mustard. Spread this mixture over the tops of unbaked biscuits. Bake at 450° (hot) for about 12 minutes.

Make angel-cake party dessert on those occasions that call for your fanciest dessert. Break an angel-food cake into chunks about the size of cupcakes, working with two forks. Spear each chunk with a fork, and frost all over with 7-minute frosting. Roll in coarsely chopped nuts. Serve with chocolate sauce.

Icy-crisp Dutch pickle sticks rate a regular spot on the relish plate. Cut dill pickles in strips. Arrange in refrigerator dish and sprinkle 3 halved garlic cloves over the pickles. Cover pickles generously with brown sugar. Let stand, covered, in refrigerator 2 days to mingle flavors.

Marmalade baked apples. Here's another use for orange marmalade that will add eating enjoyment. Place cored, unpared apples in a baking dish, and fill each apple with 1 tablespoon orange marmalade. Top with a whole marshmallow. Pour 1 cup of water around the apples, and cover. Bake at 350° (moderate) for 45 minutes. Serve these baked apples plain or with cream. Very good after a heavy meal. END

It's the TOPS!

BAKER'S

BRAND-NEW

Chocolate Topping Pie!

The topping is the news—lovely and melt-in-your-mouth, made with Baker's Chocolate. On this never-before pink peppermint pie it's a sensation . . . or with your own chiffon, cream or parfait pie. You'll be the hostess with the *mostest* compliments ever!

Product of General Foods

BAKER'S CHOCOLATE TOPPING

Cream 6 tablespoons butter; add 6 tablespoons confectioners' sugar gradually. Add 1½ squares Baker's Unsweetened Chocolate, melted, and 1 egg yolk. Mix well. Spread on chilled pie.

PEPPERMINT CANDY FILLING

1 envelope (1 tablespoon) gelatin
¼ cup cold water
2 egg yolks, unbeaten
1¼ cups milk
½ cup finely crushed peppermint stick candy
½ cup cream, whipped
Few drops red coloring
2 egg whites
⅛ teaspoon salt
¼ cup sugar
1 baked 9-inch pie shell

Mix gelatin and cold water. Combine egg yolks and milk, and cook and stir over low heat until mixture coats a metal spoon. Pour over gelatin. Add candy; stir until dissolved. Chill. When slightly thickened, fold in whipped cream and coloring. Beat egg whites with salt until foamy, then add sugar gradually, beating until peaks hold. Fold in gelatin mixture. Spoon into pie shell; chill till firm. Spread with topping; chill again.

Everything chocolate tastes BEST when it's BAKER'S!

It's always time for Revere Ware

Vegetables and fruits retain that wonderful garden-fresh flavor when they're cooked the Revere low heat "waterless" way. And you save the precious vitamins and minerals that protect health and vitality. The copper bottom conducts heat fast, also spreads heat evenly, to avoid hot spots. Gleaming stainless steel is easily cleaned. Thus kitchen work is eased, fuel bills are lowered, kitchens are cooler, odors are reduced when you use beautiful, Copper-Clad Stainless Steel Revere Ware. Join the happy millions who have found that it is always time for Revere Ware when it's time to start cooking. You will find skillets, sauce pots and pans, kettles, double boilers, mixing bowls, racks and many other "Kitchen Jewels" at your favorite store in the United States and Canada. Look for the Revere Seal on the copper bottom to make sure you get the finest cooking utensils that money can buy. Revere Copper and Brass Incorporated, Rome Manufacturing Company Division, Rome, N.Y.

SEE REVERE'S "MEET THE PRESS" ON NBC TELEVISION EVERY SUNDAY

Quick Supper Soup
Makes 8 servings

Melt . . . . . **1 tablespoon shortening**
Add . . . . . **¾ pound ground beef**
1½ cups (3) diced onions
Cook until meat is done.
Add . . . . . **1⅓ cups (3) diced carrots**
2½ cups (3) diced potatoes
1¼ cups diced celery
1 No. 2 can (2¼ cups) tomatoes, undrained
4 cups water
2 teaspoons salt
1 tablespoon sugar
Cover and simmer about 45 minutes.
—*Mrs. Warren Benner, Ohio*

Clam Chowder
Makes 6 servings

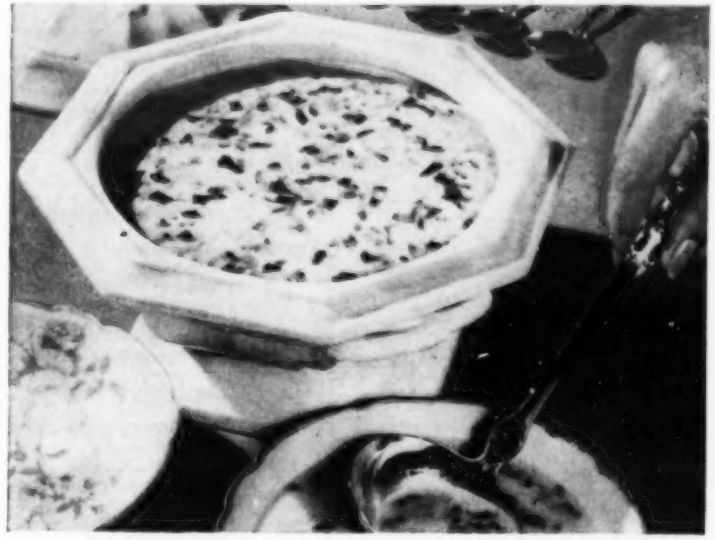
Fry . . . . . **3 slices bacon,** chopped
Add . . . . . **½ cup onion,** chopped
Cook until onion is soft.
Add . . . . . **2 cups diced, raw potatoes** with
¾ cup water
1½ teaspoons salt
few grains pepper
Simmer until tender.
Add . . . . . **½ cup whole kernel corn**
Cook until corn is heated.
Add . . . . . **2 7-ounce cans minced clams**
Simmer for 2 minutes.
Add . . . . . **1½ cups milk,** scalded
1 teaspoon butter.
—*Mrs. J. M. Erickson, North Dakota*

Salmon Chowder
Makes 4 servings

Combine **1 cup diced potatoes**
⅓ cup sliced onion
2 cups boiling water
½ teaspoon salt
7¾-ounce can (1 cup) salmon, drained
1 buffet can (1 cup) cream-style corn
1½ teaspoons butter
¼ cup chopped green pepper
Cover and simmer about 30 minutes.
Remove from heat.
Add . . . . . **¼ cup light cream.**
—*Mrs. Robert Saeger, Wisconsin*

Ten hearty soups

Any one of these good soups can start a man-size dinner . . . or make the whole of your own luncheon



Green-vegetable Soup
Makes 4 servings

Chop . . . . . **1 small bunch water cress**
½ head (2 cups) lettuce
3 small (¼ cup) green onions
½ cup green celery leaves
1 cabbage leaf
3 sprigs parsley
Heat . . . . . **2 tablespoons butter** in saucepan
Add vegetables; simmer for 8 minutes, stirring constantly.
Add . . . . . **1 quart chicken broth**
1 teaspoon salt
⅛ teaspoon pepper
Cover and simmer for 45 minutes.
Beat . . . . . **1 egg yolk** with
½ cup cream
Add to soup just before serving.
—*Mrs. A. D. Trochinski, Minnesota*

Cream of Baked Bean Soup

Makes 5 servings

Cook together about 5 minutes
- 1 1-pound, 5-ounce can pork and beans
- 1 cup water
- 3 tablespoons chopped celery
- 3 tablespoons chopped onion
- 1 teaspoon salt
- few grains pepper

Press mixture through a sieve.
Add ..... 1½ cups scalded milk.

Split-pea Soup

Makes 5 quarts

Soak ..... 2½ cups green split peas overnight in
- 1 quart water

Add ..... 2 quarts water
Bring to a boil.
Add ..... 3 bouillon cubes
- 3 carrots, quartered
- 2 celery stalks, quartered
- 2 sprigs parsley
- 2 tablespoons salt
- 1 bay leaf
- ¼ teaspoon cayenne
- ⅛ teaspoon pepper

Cover; simmer for 1½ hours.
Force through sieve; return to pan.
Mix ..... 3 tablespoons flour with
- ⅓ cup water

Add flour mixture; simmer 10 minutes.

Corn-Vegetable Chowder

Makes 6 servings

Cook ..... 1 cup diced celery in
- 1 cup water until tender

Measure 1 cup water
Mix ..... 1½ tablespoons flour with enough of the water to form paste
Add to the paste the rest of water and
- ½ cup evaporated milk

Stir into the celery and bring to a boil, stirring constantly.
Add ..... 1 cup canned corn, drained
- 1 cup canned tomatoes
- 2 tablespoons chopped pimiento
- 1½ tablespoons butter
- 1 teaspoon salt
- 2 tablespoons grated Cheddar cheese.

Personality Potato Soup

Makes 5 servings

Simmer ..... 3 cups diced potatoes
- ¾ cup diced onion
- ½ cup diced celery in
- 1¼ cups water for 45 minutes

Drain and save vegetable liquid.
Mash vegetables; return to liquid.
Add ..... 3 cups milk
- 1 tablespoon salt
- ⅛ teaspoon pepper

Blend with rotary beater; heat.
Fry ..... 8 slices bacon, diced
Top with crisp bacon and
- 2 tablespoons minced parsley.

—*Mrs. Don Magdefrau, Nebraska*

Cheese-and-Onion Soup

Makes 4 servings

Cook ..... 2 cups diced onion in
- ¼ cup shortening

Blend in 2 tablespoons flour
Add gradually, stirring well:
- 4 cups hot milk

Cover; cook 20 minutes over hot water.
Pour mixture slowly into
- 2 egg yolks, beaten

Add ..... 1 teaspoon salt
- ⅛ teaspoon pepper

Sprinkle toast cubes with
- grated Parmesan cheese

Float toast on soup.

—*Mrs. S. L. Nelson, Minnesota*

Lima-bean Soup

Makes 6 servings

Wash ..... 2 cups dried Lima beans
Cover with cold water.
Soak 4 hours, or overnight; drain.
Add ..... 3 cups cold water
- 1 small onion
- 1½ teaspoons salt

Bring to a boil.
Skim, cover, and simmer for 1 hour.
Add ..... 2 beef-bouillon cubes to soup
Stir to dissolve; mash Lima beans.
Stir in 1½ cups milk
- ½ teaspoon pepper
- 3 strips crisp bacon, diced

Heat to steaming; sprinkle with
- chopped parsley.

—*Mrs. Granville Auten, Illinois*

Model C-15 holds over 450 lbs. of assorted foods.

Costs you less to eat the best with this genuine Deepfreeze Home Freezer!

Are you shocked, these days, at what one bag of groceries can do to a ten dollar bill? Then get a genuine Deepfreeze Home Freezer and cut your food bills 10 to 25% through volume buying!

You feed your family better meals, too, when you own a Deepfreeze Home Freezer. Meats, vegetables and fruits retain their natural flavor, color, texture and food content. You can also give your menus greater variety, because you always have so many different foods on hand.

For top quality be sure the famous trade name *Deepfreeze* is on the Home Freezer you buy, and on the packaging materials you use. Choose your new Deepfreeze Home Freezer from the complete line that includes six beautiful chest-type models in 7 to 23 cu. ft. capacities, and the sensational new 11 cu. ft. upright model. See them at your nearby Deepfreeze Appliance Dealer's today!

Deepfreeze Home Appliances

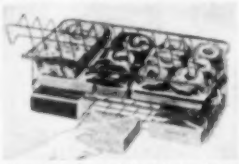
TRADE-MARK REG. U. S. PAT. OFF.

© 1952 Deepfreeze Appliance Division, Motor Products Corporation, North Chicago, Illinois. Makers of genuine Deepfreeze Home Freezers, Refrigerators, Electric Ranges and Water Heaters. Specifications subject to change without notice. Deepfreeze Home Appliances are also available in Canada.

Every Thursday Evening • Gabriel Heatter brings you the World's News • Mutual Network

New Deepfreeze "Casseroles"

Four one-pint aluminum utensils, beautifully finished in red, blue, green and gold, make it easy to store a pre-cooked meal or left-overs. You freeze, heat, serve, all in the same colorful containers. Exclusive with Deepfreeze!



New Deepfreeze "Handy Basket"

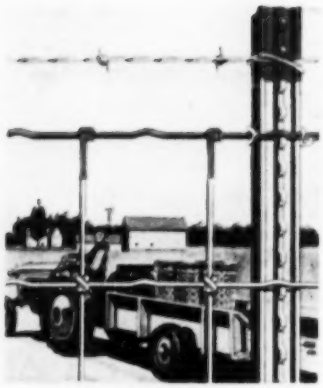
Keeps frozen foods you use most often at your fingertips . . . eliminates searching. Double-deck basket has hinged side for easy removal of bottom packages . . . without disturbing those above. Exclusive with Deepfreeze!

New Deepfreeze "Silent Signal"

The ultra-modern "control panel" of your Deepfreeze Home Freezer. White light shows when power is on. Red light glows if inside temperature gets too high for safety. Makes it easier to control temperatures correctly.

New Refrigerator by Deepfreeze

Deepfreeze also brings you a new and finer Refrigerator! Outstanding features are Automatic Defrosting, a genuine Deepfreeze Freezer Compartment, and "The Door that Stores More." 8 models, 9.5 to 11.5 cu. ft. capacity.



No wonder you see Red Brand fence so often

You can't beat experience as a guide to *extra* value.

And that's why you see Red Brand fence so often. Thousands of farmers have learned by experience, on their own farms, that Red Brand fence and those easy-to-set Red Top steel posts mean more fence for the fence dollar.

The reason? It's because the wire used in Red Brand fence, made in Keystone's own wire mills, contains the right amount of copper to resist rust. And in addition, Red Brand fence is Galvannealed for even greater rust-resistance and longer service life.

So take advantage of the experience of farmers everywhere. Insist on long-lasting Red Brand fence.

If you don't know the name of the Red Brand dealer located nearest you, write us. Keystone Steel & Wire Company.

Red Brand Fence

Keystone Steel & Wire Company

Peoria 7, Illinois

MAKERS OF RED BRAND FENCE • RED TOP STEEL POSTS • POULTRY NETTING • NON-CLIMBABLE FENCE • NAILS • BALE TIES • GATES

Makes $4.40 an hour

grading and candling eggs

By Walter J. Hunt

"I make $2.50 a case over local prices by shipping eggs east, to New York, where buyers are plentiful," says A. L. Thomson, in central Minnesota. "For my flock of 850 heavy-producing Leghorns, which average 200 eggs each per year, it counts up to $1,000 annually."

To earn this extra income, all Thomson does is spend 45 minutes a day cleaning, grading, and packing eggs—or 225 hours in 10 months. This includes the 2 hours required once a week to haul his eggs to the shipping point. Divide $1,000 by 225 work hours and you get $4.40 an hour. There is no secret to his formula. Other poultrymen could do the same.

The first thing Thomson did to improve his marketing was to make an agreement with a reliable commission man in New York to receive and sell his eggs. Thomson got the name of a receiver from a neighbor who also ships to New York. To find a reliable commission man, his neighbor had gone through a process of elimination. Names of commission agents in New York were taken from a produce journal. Then four or five were tried and the one who performed best was chosen.

The next thing Thomson did was build a small egg room, 10x10 feet, just a step off the laying house. The walls were made of ordinary concrete blocks which help keep the egg room cool during hot summer months. In the winter, a small oil heater is used to prevent freezing.

On a homemade bench along one wall, Thomson does the cleaning. Eggs are gathered in a heavy wire, rubber-coated basket. Soiled eggs are dry-cleaned with sandpaper tacked onto a small block of wood padded with sponge rubber.

Two simple scales are used to make sure eggs measure up to requirements. His standard pack averages 24 ounces per dozen. Above the bench is a thermometer which tells him the daily temperatures at a glance. Egg-production records are recorded on sheets above the bench.

Next to the first bench is a low table holding two egg cases. Above the bench is a homemade candler Thomson built by placing an electric bulb inside a tin can. The top of the can was replaced by heavy but pliable leather, with a hole large enough for the end of an egg.

"All produce houses grade and candle their eggs," Thomson remarked, "and if I want top prices, I have to do it, too." Thomson takes out any eggs having dark spots in them. From 12 to 14 cases are sold each week, and every case except one contains standard-sized, clean, fresh, candled eggs. The exception is a split case, in which the checks, pullet eggs, and peewees are included. The outside is marked—showing how many of each there are. The commission man sells them as such, and Thomson takes what-

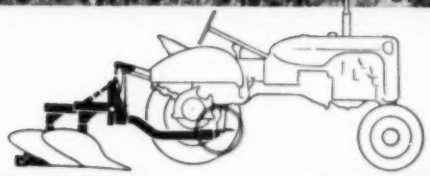
[*Turn to page 60*

Photographs: Author

Dirty eggs are dry-cleaned with sandpaper tacked onto a small block of wood padded with sponge rubber. The eggs are gathered in a rubber-coated wire basket

A homemade egg candler is built by placing bulb inside tin can. Top is covered with pliable leather with center hole. Doubtful eggs are weighed before packing

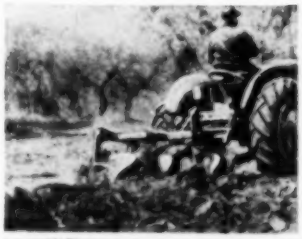
Now! FREE-SWING Implement Control



only 1 hitch point to line up

How Free-Swing Plow Dodges Stones

This remarkable action picture shows a 3-bottom WD mounted plow striking a large underground stone. Initial shock is absorbed by a heavy compression Traction Booster spring and superstrength plow beams with spring-steel temper. Single-point hitch lets plow dodge to either side of stone or ride over it without breakage.

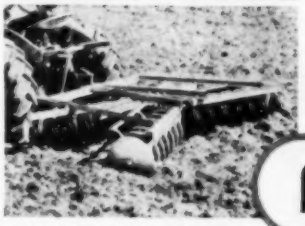


Seeing Double?

No—it's actually the new 2-furrow, 2-way A-C Spinner Plow that eliminates dead furrows and plows all furrows uphill. Conserves soil and moisture. Keeps land level for irrigation. Here is a coming Traction Booster plow for all territories.

Never Grease It

New mounted disc harrows for CA and WD Tractors have lifetime-greased BAL-PAK bearings. Save time and grease, pull easier, last longer. Harrows are Free-Swing...free to go where tractor leads. Hydraulic lift for end turns and transport. Use Traction Booster in heavy going.



Hitch and GO! Minute-quick!

New A-C hydraulic implements with FREE-SWING control are a snap to attach, and have a new easy-steering "feel." *They follow where the tractor leads*—around curves, over uneven ground, along terraces.

The single master hitch point on CA and WD tractors simplifies attaching mounted tools. Implements are free to swing right or left for steering around the contour or dodging stones.

TRACTION BOOSTER lets the implement hold *level depth* by increasing weight automatically on the tractor drive wheels, preventing slippage.

POWER-SHIFT tractor wheels are moved in or out by engine power, to match implement spacing for any crop.

Anything less is farming in the past. Your Allis-Chalmers dealer can show you tomorrow's way—ask him.

ALLIS-CHALMERS
TRACTOR DIVISION · MILWAUKEE 1, U. S. A.

BAL-PAK is an Allis-Chalmers trademark.

No other tractor tire gives you greater PROTECTION

UNCONDITIONALLY GUARANTEED for 2 years

WHAT a guarantee! Armstrong hands you the biggest dollar protection any famous tire manufacturer ever offered! Reason? Armstrong Tractor Tires can take the beating longer and better. Rugged, more flexible Rhino-Flex shock-absorbing carcass. Special traction design delivers extra powerful pulling strength. Open bars clean as they roll. Farmers across the country know the endurance record of Armstrong Tires.

● Look to Armstrong also for passenger and truck tires. Famous Cushion Ride passenger tires *unconditionally guaranteed for 18 months against all road hazards.* Cold rubber treads mean 30% more mileage. Truck tires save you big money—low initial cost, low service cost, longer wear.

LEFT TO RIGHT:
Truck Tire
Cushion-Ride Passenger Tire
Tractor Tire

ARMSTRONG Rhino-Flex TIRES

ARMSTRONG TIRES

Armstrong Rubber Co., West Haven 16, Conn., Norwalk, Conn., Natchez, Miss., Des Moines, Iowa, 601 Second Street, San Francisco, Calif. *Export Division:* 20 East 50th Street, New York 22, N. Y.

Makes $1.40 an hour

From page 28

ever they bring. By doing this, he gets rid of everything.

Thomson uses fiber egg cases costing 90 cents apiece. Each holds 30 dozen. He prefers them to either wooden or corrugated paperboard cases. The freight is $1.20 a case from Minneapolis to New York and, of course, the commission man is paid, too. But Thomson still makes his $2.50 above home markets. He says he probably could peddle eggs from house to house in a nearby city and get a good price, but the time and labor involved make this method of selling prohibitive.

Thomson and a neighbor deliver their eggs once a week to a forwarding station in Minneapolis, 30 miles from his farm. From the city, the eggs move in a truck loaded with refrigerated, packaged freight and are in New York within four days.

"It's an entirely satisfactory way to sell eggs," says Thomson. "If you want to stop in the winter and divert your output to a hatchery, you can do it. Then go back to shipping the remainder of the year. I can send one case at a time, or a dozen cases. It is a flexible system, and it offers the producer more freedom than he can expect in any other way of marketing eggs." END

Why you say it

Modern housewives, who take the electric iron quite for granted, do not always realize what a boon it actually is. In Grandmother's day, it was necessary to heat an iron by placing it among the glowing embers of a fire.

These crude irons stayed hot only a short time, so it was customary to use several—ironing with one while the remainder were heating. It was hard to keep the irons at the right temperature.

An amateur who tried to speed up her work by using five or six flatirons usually discovered to her sorrow that she could not keep up with all of them. If one remained in the embers too long, it became so hot that it scorched the garment which was to be ironed. A common tendency on the part of zealous housewives to have *too many irons in the fire* resulted in the expression's broader sense of having too many activities of any sort.—*Boyd G. Wood.*

I bring you Record-Making Production—

of EGGS: *Feed Power* develops pullets *fast* for early, EXTRA EGGS . . . promotes sustained HEAVY LAYING . . . keeps your feed cost per dozen LOW. *Feed Power* is yours in all 3 ways of Wayne Feeding . . . All-Mash, Mash-Scratch, Concentrates—in Mash, Pellet or Krum form. Get going *now* for *all the eggs your hens can lay* . . . with amazing *Wayne Feed Power!*

of MILK: *Feed Power* stimulates HEAVY MILK FLOW, makes for LONG COW LIFE. Start *now* to get *all the milk your herd can give* . . . with the *Feed Power* of labor-saving Wayne Dairy Feeds and Supplements . . . tailor-made to fit in with your pasture and roughage supply. Remember too, the Wayne Way builds big, growthy calves and heifers at low cost . . . lets *you sell more milk!*

of PORK: *Feed Power* cuts your corn and farm grain requirements . . . grows and finishes out *top hogs* with minimum time, work, and feed. Start now to build each 100 LBS. OF PORK in record time . . . speed your hogs to early, HIGH markets . . . with the *power* of the special Wayne Hog Feed that fits your need—complete feeds, concentrates, supplements.

GIANT FEED POWER
CREATED FOR YOU BY WAYNE RESEARCH

. . . by scientifically blending and balancing Antibiotics, Vitamin B-12 and other high-potency, high-quality ingredients in correct, fortified proportions for amazing Feed Power! See your Wayne Dealer now!

WAYNE FEEDS

Copyright 1952 Allied Mills, Inc

ALLIED MILLS, INC. *Builders of* TOMORROW'S *Feeds* TODAY!

Executive Offices: Chicago 4, Ill. Service Offices: Ft. Wayne 1, Indiana

CHOPPERS' CHOICE

PLUMB AXES

Choppers are swinging to Plumb—the axe you'll prefer too.

It delivers more power with less effort because it's balanced to perfection. Every blow falls true, with fullest force. It bites deep. Frees itself quickly.

The head is made of special analysis steel, scientifically tempered. That's why the cutting edge stays sharp longer and the bit is extra hard.

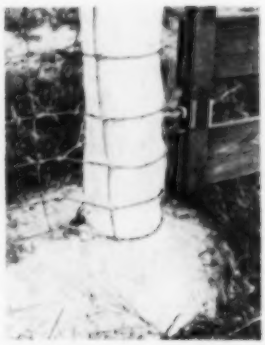
Plumb has made this axe as flawless as a tool can be. Choppers—farmers and outdoorsmen—have made Plumb their first choice over all other axes combined.

Quality Always FIRST
PLUMB
is FIRST in Quality

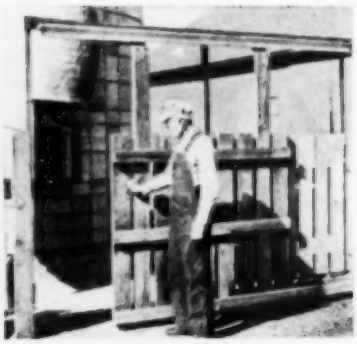
PLUMB®

HAMMERS • HATCHETS • AXES • FILES

Gates, gates, gates *From page 35*



Gatepost is sunk into 4-foot concrete base by D. Howard Doane. Sag is corrected by adjusting large nut



Sliding gate is easier to operate with cattle in feedlot than one on hinges, says Elmer Denkman, Stanwood, Iowa. Gate hangs on a barn-door track

Self-balancing gate eliminates lifting for Carl Goeken, Cass County, Iowa. Farm Manager Marvin Ridinger shows how flexing action allows gate to clear snowdrifts or lets hogs pass under. Adjustable spring tension balances gate. Single bolt through each joining allows easy flexing. Rod at end of gate holds it in any open position

Let the pigs shell and grind your corn

Unless you're in a hurry to get hogs to market quickly, there isn't much to be gained by shelling and grinding corn. Tests at the Ohio Agricultural Experiment Station show that neither shelling nor grinding corn increases the gains per unit of feed for fattening pigs. However, pigs in the experiment did put on weight faster on ground corn than on ordinary ear corn.

Test groups on ground corn reached 220 pounds about 30 days sooner than pigs that ate ear corn. Feeding ground corn may make it possible for farmers to get pigs on earlier, higher markets than if ear corn is fed.

In an experiment to study methods of feeding pigs on pasture, six lots of 20 pigs each were used. At the start of the test, they averaged 47 pounds at 68 days of age. Five of the lots were fed on rape and one lot on Ladino clover pasture.

Each group received, in addition to corn, a supplement of meat scraps and soybean oil meal in a 1:2 ratio, a B_{12} and antibiotic supplement, and a mixture of iodized salt, limestone, bonemeal, and a trace of cobaltous chloride.

The first lot were fed a mixture of supplement and ground, shelled corn. They *required 326 pounds of feed per 100 pounds of gain* and reached an average weight of 220 pounds in 100 days.

Pigs in the second lot received as much supplement as those in the first lot. Instead of ground, shelled corn, they got a full feed of ear corn twice daily. They *ate 342 pounds of feed per 100 pounds of gain* but needed 131 days to reach the 220-pound average.—*M. M., Maryland.*

This little pig will bring more dollars with

AUREOMYCIN

as a supplement in feeds and as a medication

This pig will go farther, faster, and look and feel better all the way than his brother of a few years ago.

The reason is aureomycin . . . the antibiotic that changed a pig's life!

The change began over 2 years ago when aureomycin became the *first* antibiotic to be used as a "growth" supplement in livestock and poultry feeds. On thousands of farms, pigs started to register astounding growth gains. Scouring declined and, in many instances, never showed up at all. Runts developed into profitable animals. *More* hogs reached market weights and did it *two to three weeks earlier*, in better finish. Farmers saved millions in feed costs.

More changes in a pig's life came as numerous experiments were conducted to determine the value of aureomycin as a medication for treating specific swine diseases. Today, aureomycin is recognized as highly effective in the prevention and treatment of swine enteritis, including vibrio dysentery, coccidiosis, salmonellosis and baby pig diarrhea.

Keep aureomycin *continually in use* on your farm "befriending" not only your pigs but your chickens, turkeys, calves and other farm animals. Let this multipurpose antibiotic bring to you, as it has brought to many thousands of other farmers and their families, "more dollars" for better farm living.

Aureomycin is available as a supplement in commercial feeds and it can be procured as a medication, in several forms, through your druggist, feed store or veterinarian. Write for free literature.

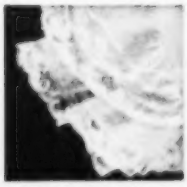
LEDERLE LABORATORIES DIVISION

AMERICAN Cyanamid COMPANY

30 Rockefeller Plaza New York 20, N. Y.

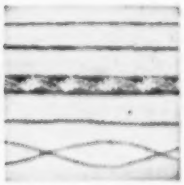
Whatever you want to sew, you'll sew it better on a SINGER!

PRETTY CLOTHES FOR YOURSELF OR THE CHILDREN

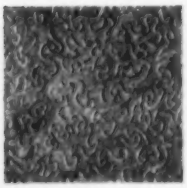


Ruffles, Gathers, Pleats—your SINGER forms them as it stitches!

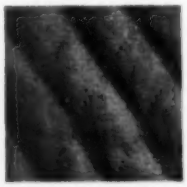
Buttonholes, Zippers—a SINGER puts them in almost automatically!



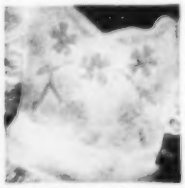
Zigzag Stitch—simply perfect for decorative effects, setting in lace.



Metallic Stitch—new glamour for party dresses; a new SINGER fashion stitch.



Quilting—fashionable and *fast*. For jackets, skirts, bedspreads, too.

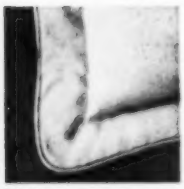


Spark Stitch—looks hand-done on dress or blouse; takes only minutes.

DECORATIVE FURNISHINGS FOR YOUR HOME

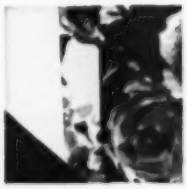
Rugs—loop or tuft types. Easy, inexpensive to make on a SINGER.

Cording—for slip covers, tailored suits. Simple the SINGER way.



Binding—sew on one or more rows, same or different widths, at once.

Etching Stitch—for monograms, gay motifs on towels, table mats.



Invisible Hems—faster than hand; thread doesn't show through on right side.

Don't be misled. SINGER sells and services its products only through SINGER SEWING CENTERS, identified by the Red "S" Trade Mark on the window, and listed in your phone directory only under SINGER SEWING MACHINE COMPANY.

There are more than 1200 SINGER SEWING CENTERS coast to coast . . . and more than 4000 SINGER service cars always ready to bring SINGER service right to your door.

See the latest models! SINGER* Sewing Machines... world's favorites for 100 years.

SINGER SEWING CENTERS

THERE'S ONE NEAR YOU TO SERVE YOU

*A Trade Mark of THE SINGER MANUFACTURING COMPANY.

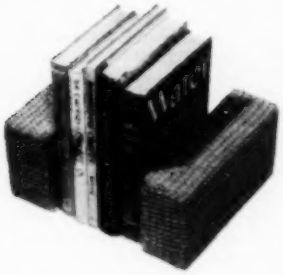
Copyright, U. S. A., 1952, by THE SINGER MANUFACTURING COMPANY. All rights reserved for all countries.

Get ready for Christmas!

Cosmetic cases. Colorful crocheted covers for lipstick and compact make wonderful "tuck-ins" for a handbag. No. 7021

What stocking wouldn't be happy to bulge with these original handmade gifts? There's something to tempt almost every taste on your gift list, and easy directions to follow for making them.

Successful Farming will be delighted to supply you with the patterns for any of the gift ideas that you wish. Simply jot down the pattern number and enclose 3 cents in stamps for each to cover the mailing cost. Send your order to *Successful Farming*, 2210 Meredith Building, Des Moines 3, Iowa.



Book ends. With these easy-to-crochet covers, a pair of humble bricks becomes a very attractive set of book ends. No. 7015

Hanger covers. Whip up these dressy hanger perk-ups in chintz, quilted plastic, or in bright printed cottons. No. 3122

Basque beret. Here's a cocky little hat any young miss will love. Add a pert pin—and what could be smarter? No. 7019

Shoulder bag. This very good-looking, quick-to-make purse will be a stunning addition to winter wardrobes. No. 7018

Cap 'n' mittens. For the toddler when winter winds blow, this little twosome makes a gay and welcome gift. No. 7020

Socks and gloves. Surprise the men in your family with these treasured matching pairs of handsome hand-knits. No. 7017

have you found out what RIT can do

to make a little girl's clothes look new!

No need for little sister to fret over hand-me-downs! They'll seem brand new when you dunk them in bright new color . . . in All Purpose Rit. And do put in a batch of socks when you're dipping little dresses, skirts or blouses. All Purpose Rit is *concentrated* . . . a little dyes a lot!

All Purpose RIT

The finest dye . . . the *high concentrate* dye . . . and only

25¢

RIT PRODUCTS CORPORATION
1457 W. Morris St., Indianapolis 6

NEW PREFINISHED FLOORING MAKES IT EASY TO HAVE

Beautiful Oak Floors

Your choice of Block, Strip, or Ranch Plank

Just lay Prefinished Bruce Oak Flooring right over your old floors . . . no sanding or finishing

Now you can give your home new beauty at low cost with a *prefinished* Bruce Hardwood Floor. Completely finished at the factory with the famous Bruce "Scratch Test" Finish, this highest quality oak flooring can be nailed right over old floors. It's ready to use as soon as laid. No messy, expensive sanding and finishing on the job.

Naturally beautiful—It's the most beautiful, most durable floor you've ever seen. The warm, natural coloring of superbly finished oak harmonizes with any room furnishing plan. You have your choice of three lovely designs: modern Bruce Block (parquet) as pictured above . . . distinctive Bruce Ranch Plank with walnut pegs . . . or ever-popular Bruce Strip.

Moderate in cost—A new Bruce Hardwood Floor will cost you less than a good rug or carpet. Easy to keep clean and beautiful, too. It's just the thing to use in fixing up or adding a room, and there's nothing finer for a new home. Ask your lumber dealer for cost estimate. Mail the coupon below for literature with room photos in color.

MAIL COUPON FOR LITERATURE

E. L. Bruce Co., 1666, Thomas St., Memphis 1, Tenn.

Send me color folder on Bruce Hardwood Floors
☐ for installation over old floors ☐ for a new home

Name _____

Address _____

City & State _____

BRUCE HARDWOOD FLOORS

How to

Beef in the freezer is like money in the bank, so freeze it right!

Much of the space in most farm families' food freezers or in a locker drawer is used for meat storage. Because meat is practically pure gold in value and takes up so much freezer space, it's important to make sure it is handled properly both before and during freezing.

Since no amount of freezing will ever turn a leathery steak into a tender one, you must select the best meat to begin with. It is not economical to give up valuable space to inferior meat cuts. So select the best for your freezer.

Slaughtering

Whether you slaughter your own meat or have it done for you, here are some points to remember. After slaughtering, the carcass should be hung where it will cool rapidly without freezing. Prompt and thorough chilling is very important to prevent spoilage and inferior quality in the meat. The proper temperature for a chilling room is about 34 degrees.

Aging

Aging softens the connective tissue and helps make the meat tender. Beef of good quality should be aged from 5 to 8 days at 34 to 36 degrees. Beef of poorer quality should be aged only 4 to 5 days.

Cutting the carcass

Tougher or less desirable cuts of beef such as brisket and shank may be boned and cut into stew meat, or ground. Trim the fat closely from meats you want to have ground. Excess fat has a tendency to develop off-flavors. Freeze ground meat without salt which often encourages rancidity.

Cuts with a large percentage of bones may be boned to conserve freezer space, and to lessen the danger of bones' puncturing the package.

Plan and specify the thickness of steaks, steaks per package, and the proportion of stew meat and ground meat you'll need. You'll find it more economical to remove the tail ends of T-bone and porterhouse steaks and use them in ground meat.

Packaging

When it comes to wrapping meats, don't let anyone talk you into scrimping on packaging materials. Buy the best freezing paper to keep your meat at its best. Wrap meat in moisture- vaporproof

freeze beef

paper especially designed for freezing (ordinary meat-wrapping paper will *not* do). Before wrapping, shape meat into its most compact form to avoid air pockets. To save space, trim off excess fat. Press the paper firmly against the meat, forcing out all air pockets. Fold the edges together in a drugstore wrap, bringing the two long edges of the paper together and folding them over until the paper fits tightly against the meat. Then roll the ends in the same way.

If you use a cellophane wrap, first heat seal and then overwrap it with freezer paper or stockinet. For other kinds of moisture- vaporproof paper, close seams with freezer tape.

Package chops and steaks so the entire contents of each package will be used up at one meal. Place two pieces of freezer paper between steaks and chops so it will be easier to separate them. Freeze them flat rather than rolled, so they can be separated while still frozen.

Mark every package plainly with the cut of meat, kind, size, weight, or number, and date of freezing.

Storing

If properly prepared, packaged, and frozen, and then stored at a constant temperature of zero degrees, beef cuts may be kept up to 12 months.

Thawing

Thaw the wrapped frozen meat in the refrigerator. A 4-to-6-pound roast takes 24 hours or more to thaw at refrigerator temperature. Thawed meat should be cooked promptly and never refrozen. Cook (after thawing) exactly as you would an ordinary cut of meat.

SUCCESSFUL FARMING

"Hello, Ellie."
"Hi, Ellie."
"Hi ya, Ellie."

Save on Oils and Greases

Use the Annual Phillips 66 Advance Order Plan!

HERE'S HOW THE PLAN WORKS: Order your Phillips *66* Motor Oils, Gear Oils, and Greases *now*. Set a delivery date before May 31, 1953.

The single delivery saves us time, trouble and handling expense. So we can offer you these special benefits:

- **Money-Saving Discounts**
- **Discounts on Orders as Small as 15 Gallons**
- **Protection against Price Increases**
- **No Down Payment—No Cash Outlay**
- **The Products You Need When You Need Them**

And most important, you get famous Phillips *66* Products . . . products you can depend on. You get Phillips *66* Heavy Duty Premium Motor Oil . . . the oil that's so good it actually *surpasses* manufacturers' recommendations for all makes of cars . . . an oil that's truly *heavy duty* so it will protect your truck and tractor, too.

See your Phillips *66* Tank Truck Driver. Get your order in and save on Phillips *66* Motor Oils, Gear Oils and Greases.

Portable pens for calves

By Bill Kennedy

Dairyman W. L. Howell, Fort Payne, Alabama, has been a dairyman for a number of years. He has done a top-notch job in all phases of his operation—except one. Howell couldn't do a good job of raising his dairy calves.

Howell claims he must have set some kind of a record for losing valuable calves before he started his present system. One after another, the calves got sick and died in the central pen he kept for them inside the barn.

At a dairy school, the state college extension man urged dairymen to try a portable-calf-pen system. So this dairyman built eight portable pens and set them on the hillside above his barns.

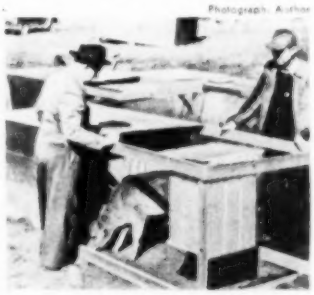
As the calves were born, they were put in the pens—one calf to a pen. The pens were moved to clean ground every week. Every calf came through the winter in good health.

Howell says the pens are inexpensive to build. He constructed his for an average of a little more than $10 each by making use of some old tin roofing.

Each pen is 4'x10' and 3' high. Half of the pen is enclosed with tin on the sides and roof. The other half is simply a wire fence. The shed and sun parlor are separated by burlap sacks which can be closed during bad weather. A covered feedbox is built in one corner of the pen.

After the success he's had with the portable pens, Howell is boosting the idea in his community. He feels sure his time and expense will be repaid as soon as the heifer calves come into production.

Photograph: Author



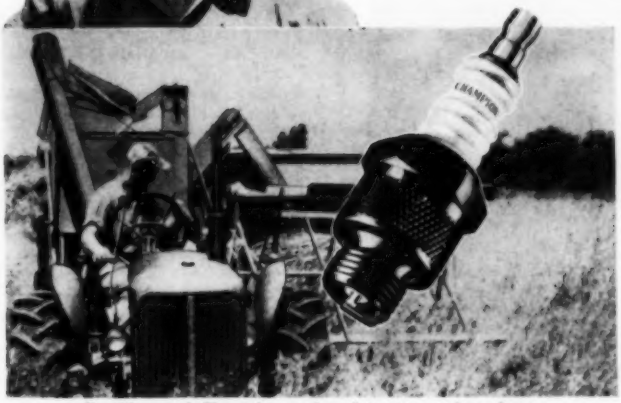
Individual calf pens are complete with covered feedbox, sun parlor, and shelter

Whenever you write us about your *Successful Farming* subscription, enclose an address label clipped from a recent copy. This will help us send you a prompt reply. Address subscription inquiries to Service Division, *Successful Farming*, Des Moines 3, Iowa.

"I'M FARMING 270 ACRES SINGLE-HANDED"

—SAYS FORMER 4-H CHAMPION, GENE WAKELAND

The Wakeland farm, Rosewood, is one of the better known farms around Huntertown, in northeastern Indiana.



Combine and Champion-equipped tractor go long hours during the harvesting season.

Power-operated false end-gate moves alfalfa load to end of wagon for one man handling.

Current experiment is a temporary snow fence silo for extra storage.

Any farmer will recognize that working 270 acres while raising a herd of Aberdeen Angus, readying prize-winning Berkshire hogs and tending a sizeable flock of chickens is a more than average one-man undertaking—even for a 10 year member of 4-H.

Of course, Gene Wakeland of Huntertown, Indiana gets help with the chores from his attractive wife—a very capable homemaker—and from their two small children. But he still has to "cut some corners" and make the most of his mechanical equipment to handle this big job.

Gene was starting his tenth year as a 4-H Club member when it became necessary for him to take over the Wakeland farm. That is when his 4-H training really helped see him through. His Angus project that had brought him honors and made him the first entry in the nation in the 1937 International Live Stock Show, paved the way for his present herd. The Berkshire project, started when he was 12, is today one of the prize herds of swine in the state. Corn, alfalfa and soy crops were other 4-H activities that are now paying him dividends.

A former 4-H king and scholarship winner from his area, and now a 4-H adult leader, Gene says—"You learn a lot of things from 4-H club work, but, to me, the most valuable lesson is cooperation—working with people and not failing them when they depend on you. You also learn the importance of selecting equipment you can depend on. Yes, I use Champion Spark Plugs. You'll find them in every engine on the place. I have confidence in them because in all the years they've been used on our farm, CHAMPIONS HAVE NEVER LET US DOWN!"

CHAMPION SPARK PLUG COMPANY, TOLEDO 1, OHIO

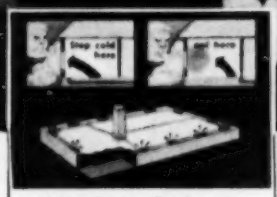
Prize winning Berkshire was Junior Champion at Michigan State Fair.

Part of a March litter of Berkshires that will compete for honors at stock shows.

Aberdeen-Angus from the herd that began with one steer given to Gene Wakeland as his first 4-H project.

Back to the barn with the hay chopper after finishing a morning's mowing.

Ask for **Dependable CHAMPION Spark Plugs**



Latest Lennox development
STOPS COLD BEFORE IT ENTERS YOUR HOME

Lennox Perima-flo Heating, newest development of Lennox engineers, stops cold at its source—the outside walls, and windows of your home. It combines the best features of warm-air and radiant heating. Small registers around the house perimeter spray warm air up over the cold surfaces where drafts start.

Lennox Perima-flo Heating is adaptable to any size home with or without a basement. Slab-floor installations, as above, have revolutionary, new Lennox reverse-flow furnaces. Ask your Lennox dealer about a Perima-flo 410 System.

In warm air heating more families buy Lennox then any other make

Lennox Furnaces carry the seals of nationally recognized testing laboratories.

...we're very comfortable!

There's no need for a shawl for grandma when the house has Lennox Aire-Flo Heating!

The Lennox Principle of constant, gentle circulation of filtered clean, warm air throughout the house makes sure of complete comfort. And the quiet, automatic operation, plus fuel-saving efficiency of Lennox warm air conditioning, adds benefits which mean complete satisfaction for the years ahead. *That's why more families buy Lennox!*

Make sure that *your* home has this ideal heating system—the result of more than 50 years of Lennox leadership!

Call your Certified Lennox Dealer. He is your community's most competent and dependable heating authority. His name is in your classified phone book. Or write the nearest Lennox office, Dept. SF-10-52, for FREE, factual, illustrated booklet: "How to Select Your Heating System."

THE LENNOX FURNACE COMPANY
World's Largest Manufacturers and Engineers of Warm Air Heating Systems
Marshalltown, Ia. • Syracuse, N.Y. • Columbus, O. Fort Worth, Tex. • Pasadena, Calif. • Salt Lake City, Utah • Decatur, Ga. • Toronto, Ont.

Ask about convenient payment plan. Call for a free inspection of your furnace.

There's a Lennox Heating System for your home and climate . . . 82 different LENNOX models . . . for gas, oil, coal, LP gas.

LENNOX *Aire-Flo® Heating*

How to disinfect barns

Every once in a while someone asks questions about the disinfection of barns to prevent disease. Here are listed some of the commoner ones. Perhaps one of them will fit your problem.

Q When is barn disinfection needed?
A After any kind of contagious disease has been known to exist in the building. Examples are Bang's, tuberculosis, shipping fever, and ringworm.
Q Need the entire barn be disinfected?
A That depends on the disease involved. The entire floor used by affected animals must be disinfected in the case of Bang's or tuberculosis. Only the pen needs to be disinfected when a disease such as ringworm or warts is involved.
Q What is the first step?
A Cleaning to remove all surplus filth and manure. Dried material may have to be soaked with water and removed with a scraper before actual disinfection.
Q What disinfectant is best?
A No disinfectant is best in all cases. However, when tuberculosis is not involved, we personally favor a lye solution for farm use. It is cheap, odorless, and effective against practically all organisms except tuberculosis germs.
Q How do I mix a lye solution?
A Dissolve 1 pound can of ordinary lye in 15 gallons of hot water.
Q How is it applied?
A Usually by spreading on the floor and thoroughly scrubbing it in with a broom. A high-pressure sprayer also can be used with good results.
Q Should ceilings, walls, and mangers be cleaned and disinfected in addition to the floor?
A Yes, if a good job is to be done. Germs can easily be present there, too.
Q Need drinking cups be disinfected?
A Yes. This job can often be done best by removing and boiling them for 15 or 20 minutes in a large kettle.
Q What about tanks?
A They make a splendid hide-out for many types of germs. If some kind of smelly disinfectant is used, they will have to be rinsed thoroughly afterward to remove odors which may keep animals from drinking from them.
Q Isn't this lye solution strong enough to cause burns?
A Yes, so it's best to apply it with a long-handled brush and wear gloves and goggles while working with it.
Q Won't it burn animals, too?
A Yes, so quarters must be thoroughly dried after disinfection.

Q Why won't the lye solution work against tuberculosis germs?

A Because they are covered with a waxy protective capsule.

Q What disinfectant can be used against these organisms?

A Various government-approved disinfectants that are either coal-tar derivatives like creolin or the newer quaternary ammonium products. If you're going to use them, you'd better make certain that you have one that's approved. Your county agent or veterinarian will be able to furnish you with a satisfactory list of such disinfectants.

Q Which is best?

A We aren't able to say, for both are about equally effective. The ammonium products have the advantage of being odorless, though, while coal-tar products may taint milk.

Q How are these disinfectant solutions mixed?

A They vary a little, and the manufacturer's directions are to be followed. In general, though, 1 gallon of disinfectant is mixed with 25 gallons of water.

Q How much will be needed for a barn?

A Twenty-five gallons of such a solution is usually considered enough for 20 running feet in a barn 30 feet wide, and this figures to 600 square feet. An extra 25 gallons of the solution is recommended when there is wooden equipment instead of steel fixtures.

Q When is the best time of year for barn disinfection?

A Usually during the pasture months, although it may have to be done in less desirable seasons of the year in case of disease outbreaks.

Q Can barns be satisfactorily disinfected in the winter?

A Yes, but animals will probably have to be juggled around a little to permit cleaning a stall or two at a time, instead of doing the whole job in a single day as can be done when animals are running outside. It's certain that a good job of disinfection can't be done when all or part of the bedding is left in stalls and pens.—*J. W. Bailey, Wisconsin.*

SUCCESSFUL FARMING

". . . well, I must go now. I'll call you again some time—it's nice to talk to someone in Rome!"

Make your home look *NEW* with Johns-Manville *Smoothgrain* Asbestos Siding . . .

The* HOME IDEA BOOK *shows how you can restyle your house in color inexpensively . . . cut upkeep costs. Dozens of other remodeling ideas, too!

Do you want the latest ideas for beautifying and improving your home? Then you'll want the 64-page "Home Idea Book." You'll be especially interested in the section on Asbestos Siding. It explains how this *smooth-surfaced*, fireproof siding can be applied right over old sidewalls, completely transforming the appearance of your home. Full-color illustrations show the beautiful, soft shades and the rich "deep grained" texture.

Also in the "Home Idea Book" are remodeling ideas for restyling interiors . . . how to cover unsightly walls and ceilings, have new rooms in no time at all with predecorated J-M Ceiling Panels and Wall Plank . . . how you can save up to 30¢ on every dollar you now spend to heat your home in winter, keep it up to 15° cooler in summer with Spintex rock wool insulation.

Whether you plan to remodel or to build, you'll want the wealth of helpful information in this 64-page "Home Idea Book." Send the coupon below with 25¢ for your copy.

Johns-Manville

64 pages in full color

Ideas for roofs—beautiful exteriors! Ideas for kitchens, bathrooms, bedrooms, extra rooms, new homes . . . many other features!

I am considering
☐ Remodeling; ☐ Building

I am interested in:
☐ Asbestos Siding
☐ Decorative Panels and Plank. ☐ Please send Instruction Sheets.
☐ Spintex Insulation
S ☐ Asbestos Roofing Shingles

Johns-Manville, Dept. BF-H, Box 60
New York 16, N. Y.

Enclosed find 25¢ for which send copy of your new "HOME IDEA Book."

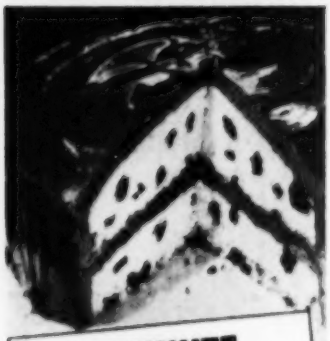
Name_____

Address_____

City_____ State_____

("Home Idea Book" not available for Canadian distribution.)

DELICIOUS!



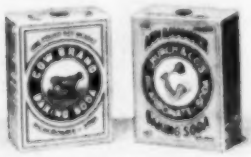
3-MINUTE BIT O' CHOCOLATE CAKE

better-textured, fresher-keeping, made with Baking Soda

• Have ingredients at room temperature. **Sift** together 2 cups sifted flour, 1 tsp. Arm & Hammer or Cow Brand Baking Soda, ½ tsp. salt. **Combine** ¼ cup vinegar, ½ cup milk, 1 tsp. vanilla. **Beat** 2 eggs with 1½ cups sugar 1 min. (125 strokes). **Stir in** flour mixture, ½ cup shortening and ½ liquid. **Beat** vigorously 1 min. **Add** remaining liquid and beat 1 min. **Fold in** 1 pkg. chocolate bits. Bake in 2 greased 8" layer pans, 1¼" deep at 375°F. (mod. oven) 25 to 30 mins. Top with chocolate frosting.

PEANUT BUTTER COOKIES

Cream ½ cup shortening with ½ cup peanut butter. **Cream** in ¼ cup brown sugar, firmly packed. **Stir in** 1 slightly beaten egg. **Sift** together 1 cup sifted flour, ½ tsp. salt, ½ tsp. Arm & Hammer or Cow Brand Baking Soda. **Blend** well into first mixture. **Chill** 2 hours. **Shape** into 1-inch balls; **place** on greased cookie sheet; **press** flat with wet fork. Bake at 375°F. (mod. oven) 10 min. Makes 48.



FREE! 20-page Cookbook. Write Martha Lee Anderson, Church & Dwight Co., Inc., 70 Pine St., New York 5, N.Y.

How to mix pattern and plain

From page 43

Large patterns in large rooms, medium-sized patterns in average rooms, and small prints in small rooms is a good rule to follow. When using two different patterns in the same room, one should be larger than the other.

The second point to consider is the colors in the pattern. They should pick up and repeat the color scheme in the room, to tie your room together.

The third thing is to choose carefully the type of patterns you use together in a room. Two florals in the same room would be distracting, just as two plaids, two stripes, or two polka dots would be. Variety is the keynote here—use a floral and a small geometric print or stripe together. Combine a textured tweed and a large leaf pattern and you will find your results far more satisfying.

Q *Approximately how much pattern should I use in my room and where should I put it for best results in decorating?*

A At the most, only 30 percent of the room should include pattern. We have compiled a chart to help you decide how much pattern you should use in a room and where. Just remember to distribute it around the room for good balance. Follow this chart and you'll see how easy it is.

Chart for pattern distribution

1. Sofa and one large chair.
2. Carpet.
3. Four walls.
4. Draperies and sofa.
5. Draperies and two small chairs.
6. Draperies and dining-room chair seats.
7. Sofa and two small chairs.
8. Two large chairs, sofa pillows.
9. Draperies and one large chair.

Follow this recipe, mix your ingredients accordingly, and your result will be a home that is harmonious and pleasing to all your family. **END**

It's Home Harvest Time

It's time to get your home ready for fall and winter—time to make it more attractive and easier to take care of. Are you looking for ideas to do this—exciting new color schemes, products that make farm living easier, ideas that will give you practical help and save valuable time, work, and money? Then, ideas galore await you during **Home Harvest Time** in the following stores. Here is a cordial invitation for you to visit them and reap many new ideas for decorating and furnishing your home.

Iowa

Fairfield ..... Bradshaw's
October 13-18
Waterloo ..... Black's
October 27-November 1

Kansas

Wichita ..... Hinkel's
October 6-16

Missouri

Springfield ..... Heer's, Inc.
October 1-4

Nebraska

Lincoln ..... Gold & Co.
September 29-October 4

Pennsylvania

Harrisburg ..... Pomeroy's, Inc.
October 6-16
Reading ..... Pomeroy's, Inc.
October 13-18

Wisconsin

Green Bay ..... H. C. Prange Co.
October 13-18

Every department in these stores will show you new easier-living products. See the demonstrations of important manufacturers' newest ways to easier farm living; hear *Successful Farming* homemaking editors or the store's homemaking consultants discuss new ideas you can use in your home. You won't want to miss seeing what's new in home furnishings.

You'll see the new *Successful Farming* film strip, *Recipes for Color*, which brings a new approach to the magic of color. It shows in exciting full color what the right colors will do for a room, how to choose and use colors, and how to combine them in sparkling color schemes. Here is an explanation anyone can understand, built in easy step-by-step recipe form. It takes you on a tour of attractively decorated actual farm homes with "before" and "after" pictures in color.

The *Successful Farming* film strip is also available to home demonstration agents and teachers for meetings, demonstrations, and clubwork. It lasts about 25 minutes and is packaged together with a detailed commentary that goes right along with each film. The commentary is designed for anyone, expert or novice, to use. The complete package is available at minimum cost.

Special take-home booklets of the complete color story are available separately for a very small extra charge.

If you are interested in securing a print of this new film strip for your club or school, write: *Successful Farming* Home Planning Service, 1716 Locust Street, Des Moines 3, Iowa.

3 generations tell you why

All over America, three generations in the same families have chosen Maytags. Mrs. C. D. Chapin, Columbiaville, Michigan, belongs to a three-generation Maytag family. Her Maytag has a big double-walled tub, Roller Water Remover, Gyrafoam washing action, and Sediment Trap.

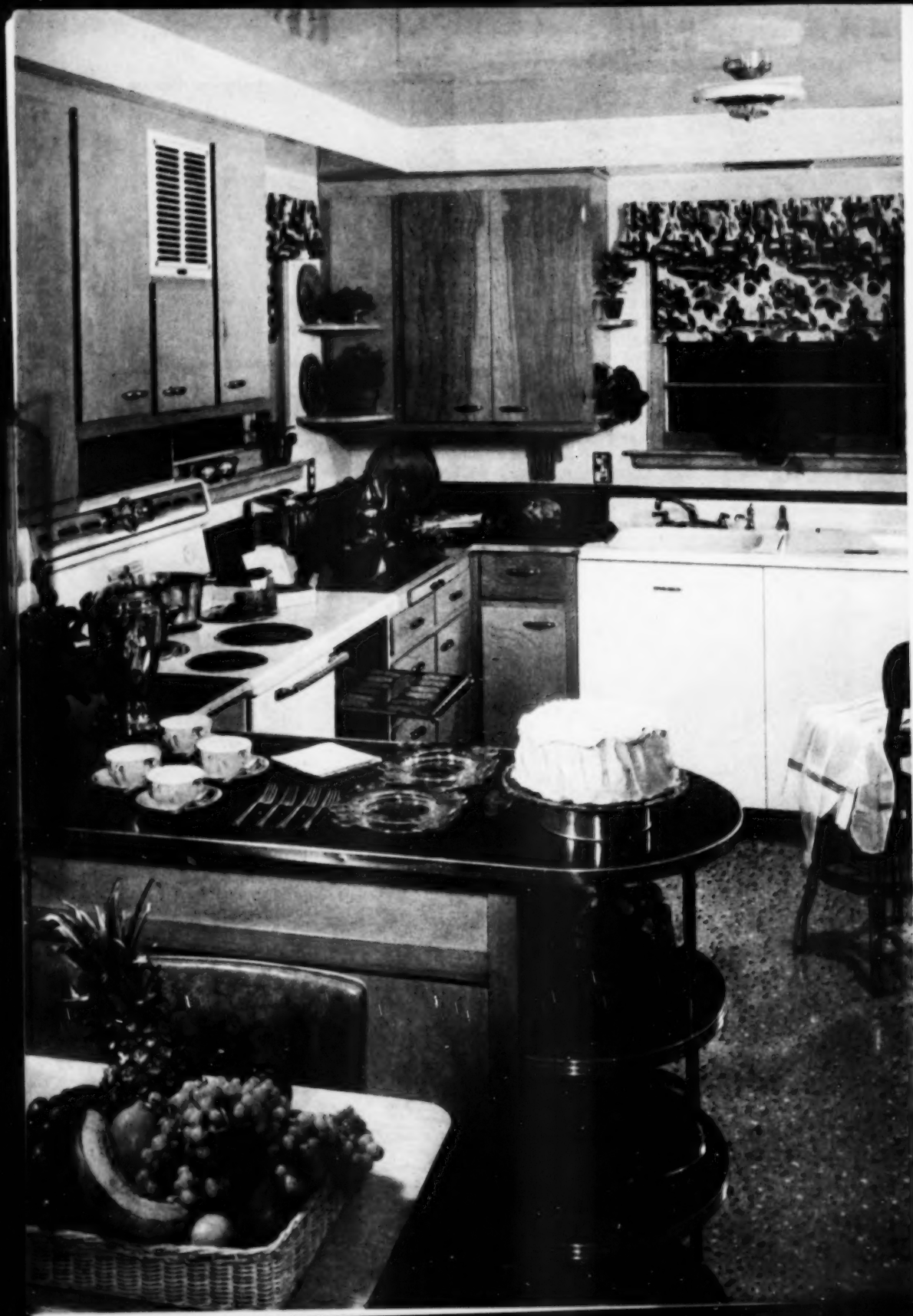
Maytag is the Automatic for you

"I grew up with Maytags," says young Mrs. Leon Martin of Detroit. "So, of course, only the Maytag Automatic could be my choice." She shows her new automatic washer to her Mother, Mrs. C. D. Chapin, Columbiaville, Michigan; and Grandmother, Mrs. George Dewey, Detroit.

Maytag Dutch Oven Gas Range. Most efficient, best-insulated oven you can buy. Speedy gas cooking. Easy to clean. Oven window. The Maytag Company, Newton, Iowa. Washers • Ranges • Freezers • Ironers.

"... washes clothes as clean as my Maytag conventional," says Grandmother, Mrs. George Dewey. Yes ... only the **Maytag** Automatic has famous Gyrafoam washing action ... the agitator action originated by Maytag. Clothes get cleaner as gentle water currents wash out even the most stubborn dirt. Safety Lid ... open it – washing action stops; close it, washing resumes. It's "children-proof." No bolting down ... perfectly balanced with adjustable legs.

"I like the way I can wash everything from nylons to blue jeans," says Mrs. Martin. That's because the Maytag Automatic lets you vary the washing time. Completely automatic operation ... even turns itself off. Up-and-over rinse flushes dirt *away* from clothes *not through them*. Thorough spin-drying leaves clothes fluffy, with no hard-to-iron wrinkles. Built by **Maytag** ... and that means extra years of dependable, trouble-free performance.



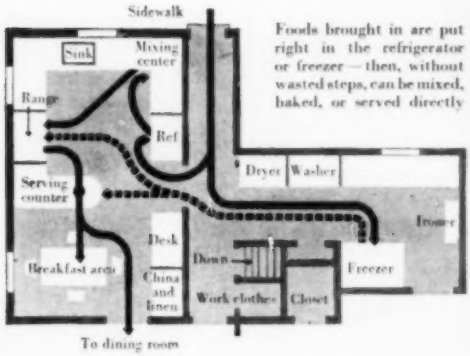
"We wanted it cheerful"

By Maurine Harris

"We like things pretty, but only if they're practical, too." When the Ross Caldwells of Morrisonville, Wisconsin, said the kitchen in their new farm home had to be *cheerful*, they didn't mean in looks alone. They wanted work-saving features to brighten the family outlook.

University of Wisconsin extension specialists helped them get complete, compact perfection. But their own hearty family personality gives it the warmth that makes you want to stay and smell rich, spicy cooking. No matter how busy it gets in the kitchen, that spick-'n'-span look shows through—simplicity and appropriate materials have a lot to do with that. Natural birch cabinets are just wiped with a damp cloth, polished with lemon oil. Dad and teen-age Ronald like the linoleum pattern—"Spots don't even show!" The Caldwells plan together for the buying of their big appliances.

Of course baking's fun—when flour and sugar are in the bins just under mixer, the refrigerator is at arm's reach, and the cabinet holds measuring cups, spoons, pans, and flavorings—all organized and handy. Right into dishwasher go the bowls



Foods brought in are put right in the refrigerator or freezer—then, without wasted steps, can be mixed, baked, or served directly

Photographs, Reynolds, Photography, Inc.

No gloom here, either! With walls a heart-warming tone of red, and window dress of bright chintz, utility room runs a close second to the kitchen for cheerfulness. Washday jobs are spread lightly over the week; automatic equipment makes them pleasant

◆ "I like red: it perks me up." So saying, Mrs. Caldwell saw to it that her favorite part of the house was generously splashed with red. But roomy, well-lighted, and easy-to-clean work centers add most to her satisfaction

More on page 78

One section of SATINA added to boiled starch overcomes "gluing action". Your iron flies on wings.

No more iron sticking, dragging or scorching. And your SATINA-Ironed things smell sweet as summer!

Switch from slow-ironing to "SPEED-IRONING" when you buy starch, buy **SATINA**, too!

- **Clothes stay cleaner; look newer; smell fresher**
- **Costs less than 2¢ a starching**
- **Easy directions with package**

Guaranteed by Good Housekeeping

A Product of General Foods

Please accept for ONLY 10¢

10 plastic clothespins in assorted colors—plus full-size package of SATINA—all for one-third less than regular price! Offer made to introduce you to Speed-Ironing with SATINA in your starch. Mail coupon with 10¢ to: SATINA, Dept. U, Box 829, New York 46, N. Y.

NAME_____

STREET_____

CITY_____ STATE_____

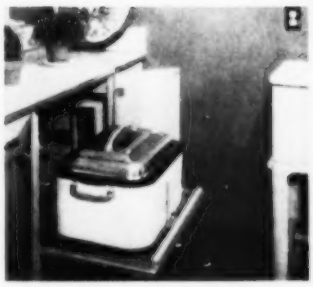
Offer expires February 28, 1953

"We wanted it cheerful"

From page 73

New kitchen brought about new, easier way of serving the meals. Now plates are dished up at a handy serving counter; second helpings are left on warm burners. Table-setting needs are all stored here

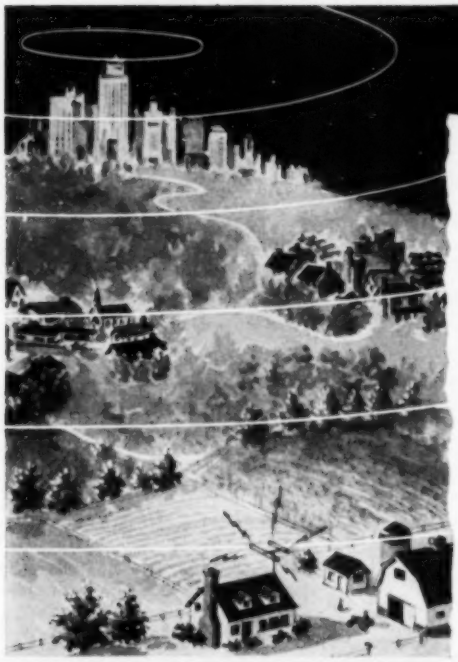
◄ The built-in "office center" has deep-file, typewriter table. Mrs. Caldwell likes for her husband to work here—"He keeps me company while I get my kitchen work done"



A pull-out table holds the roaster at convenient peek-in height. This, plus long counter space, makes a wonderful extra cooking and serving center for big dinners

Three drawers act as hampers for soiled clothes, sorted ready to wash. Fourth deep drawer holds things to be mended. Mending, washing needs are all here. **END**

Better See Motorola TV



THE FARTHER AWAY YOU LIVE THE MORE YOU NEED THIS AMAZING BUILT-IN

Distance Reception

New "SABRE JET" Tuner—Super-sensitive, super-fast . . . picks up picture signal, shuts out picture "static." Snaps in perfect sound, brightness, focus instantly.

Area Selector Switch. 3-position built-in signal booster for just-right pull-in power for your distance from station.

WHEREVER YOU LIVE, THRILL TO THE NEW REALISM OF THE SENSATIONAL

Standout Picture

MODEL 17K14—Rich mahogany finish console. 17 inch picture tube.

1. **New "Forward Mounting."** Tube face stands out from set, projects picture forward into room.

2. **"New Dimension" Cylindrical Tube.** Curved side to side for sharpest, most realistic picture in TV.

3. **New Improved "Glare-Guard."** Precise optic tilt of tube and Duplite safety glass eliminate reflected glare.

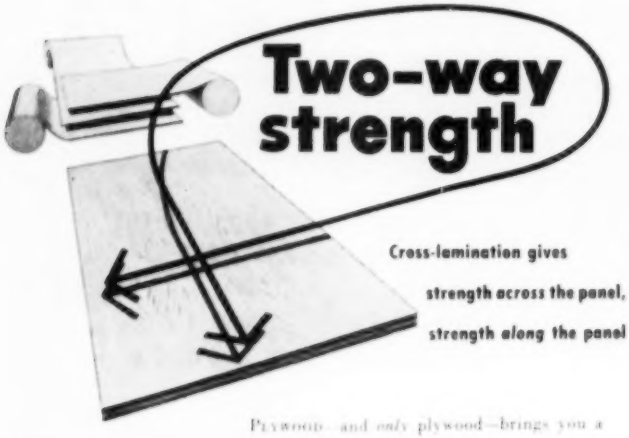
4. **New Built-in "Lifetime Focus."** Permanently set for razor-sharp pictures.

Motorola TV

WORLD'S LARGEST EXCLUSIVE ELECTRONICS MANUFACTURER

33 distinctive models to choose from. Prices start at $179.95—slightly higher South and West. Prices include Excise Tax and full year warranty on all parts, tubes and picture tube.

Only Plywood Brings You *All* The Advantages of



PLYWOOD—and *only* plywood—brings you a modern panel material that is:

- Large Size
- Light Weight
- Real Wood
- Easy to Work
- Durable*
- Splitproof
- Puncture-proof
- Kick-proof
- Extra Strong
- Extra Rigid

Yes, only plywood combines *all* these important advantages. Here's why:

Wood is *extra* strong along the grain. Plywood is a cross-laminated panel of real wood—permanently bonded—with the grain of alternate plys running in opposite directions. In plywood, the natural grain-strength of the wood works *two ways*.

Plywood's unique advantages make it the all-purpose farm material. Anyone can work with plywood; only ordinary skill and ordinary carpentry tools are needed. Plywood cuts building time as much as 50% . . . means stronger, more rigid construction, long-time investment value.

Learn more about plywood's farm advantages. Write for 28-page booklet, *Better Farm Buildings With Exterior Plywood*. Send 10c to Douglas Fir Plywood Association, Dept. 2210, Tacoma 2, Wn.

For New Buildings . . .
For Maintenance, Repair

Plywood farm structures are strong, rigid, tight, draft-free. Plywood's two-way panel strength means you can build with fewer framing members.

Large, light panels — easy to handle and work — save time on all your maintenance and repair jobs. No special tools are needed!

Plywood buildings are light, yet rigid. Portable buildings of plywood move easily, won't rack apart. Two-way panel strength saves you work and worry.

Plywood is ideal for farm homes—remodeling, too. Can't be beat for cabinets, built-ins, paneling . . . for sheathing, subflooring, siding. Ask your retail lumber dealer!

*Durable EXTERIOR-TYPE plywood can even be boiled in water! It's made with 100% waterproof glues. Use EXTERIOR for all farm service buildings; the registered EXT-DFPA on the panel edge is positive identification. Inside the farm home, use interior-type Douglas fir plywood. Ask your retail lumber dealer!

Douglas Fir

Plywood

AMERICA'S BUSIEST BUILDING MATERIAL

Large, Light, Extra-Strong Panels of Real Wood

Dress up your Halloween party with several of these original table decorations

A "bewitching" idea

for Halloween

Here comes Halloween, right around the corner of the calendar. And there's no better time for a party. For parties go hand in hand with this witches' and spirits' holiday.

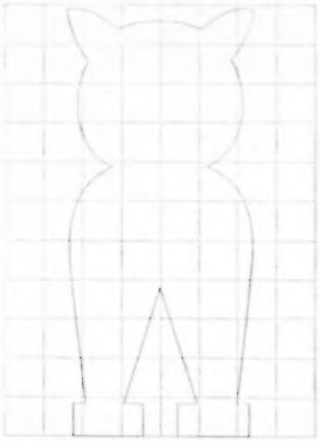
Halloween entertainment comes easily, but if you're at a loss when it's time to decorate, here's a clever and easy start for your table. Arrange the ingredients just as you wish. They're simple to make and add up to a most colorful, whimsical setting.

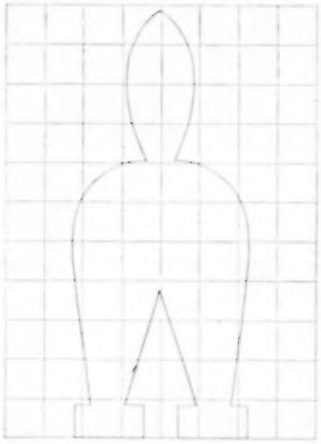
Black witch place card. Using the scale drawing below, draw a pattern for the witch on a sheet of newspaper. Make her measure about 7 inches tall. Cut out the newspaper pattern. Lay it on an 8½x11-inch piece of construction paper, folded in half. Lay the right edge of her skirt along fold so the backs of skirt will be joined. Glue her hands around the handle of broomstick (instructions for the broom follow). Print the name of each guest in white ink on a witch's skirt.

Lollipop witch's broom. Measure two strips of orange crepe paper ½ inch longer than a lollipop and wide enough to go once and a half around the lollipop. Snip edge of one of the strips to give broom effect. Place this over the other strip. Shape the two around the lollipop, securing the top edge to the stick with a

narrow band of black crepe paper. Wind another black band around about an inch down to add finishing touch.

Giant black cat. For centerpiece, cut cat from 14x22-inch piece of black construction paper, using the patterns below as your guide. Cut two strips of black paper 2x10 inches. This will be the springy body. Join one end of each strip





to the other to form an "L" and glue in place. Fold one strip over the other until a folded square is formed. Attach one end of this square to the front and the other to the back of the cat, so that these pieces can be expanded and the cat will stand up. If you wish, add a small black prop to each foot to give extra support when the cat is standing.

Make the witch's cauldron from a white nut cup. Cover it with a strip of black paper and add a pipe-cleaner handle painted black. Fill cauldrons with candy corn and set one at every place around the table.

Now round out your decoration with a big pumpkin place mat. This is easy to snip out of orange construction paper and makes an effective background for each table setting. **END**

TOPS IN TOOLS

TRUE TEMPER

MANURE FORKS

4, 5 or 6-tine forks for all requirements from coarse to fine texture materials. All are forged from solid steel for extra strength . . . shaped for perfect "hang" and balance . . . polished oval tines tempered for toughness and resilience. Fire Hardened handles resist weather, wear and vermin . . . the finest finish ever developed for tool handles.

ALUMINUM GRAIN SCOOPS

These extra light weight scoops are also ideal for general purpose use. Made of 10-gauge aluminum alloy, they're heat treated and ribbed for strength . . . non-corrosive . . . non-sparking . . . acid-resisting. At your favorite hardware store. True Temper Corporation, Cleveland 15, Ohio.

TRUE TEMPER

Corporation

FOR OVER 100 YEARS MAKERS OF FINE TOOLS, FISHING RODS, GOLF SHAFTS

Farmers needed for defense against

AIR ATTACK

Some farmers are already participating in Ground Observers Corps—more are needed

Some farmers are scanning the skies these days. And they're not figuring on whether they should cut the hay, or if the sky looks too much like rain. These farmers are searching for airplanes—one of which might be a hostile A bomber headed for an American target. This is their duty as volunteers in the Ground Observers Corps of the civil defense program.

This team, the Ground Observers Corps, is the backbone of our civilian aircraft-warning system. It consists of observation posts spaced approximately 8 miles apart and linked by priority telephone service with a central point, called a filter center. This network makes it possible to spot, report, and track all aircraft in areas poorly protected by radar.

Since World War II and the early days of the Korean conflict, experience has shown the farmer to be admirably located for observer work. Living in sparsely populated areas surrounding large cities or key industrial zones, farmer observers can spot and report planes long before they appear above a vital target.

These spotters receive 30 hours per year of [*Turn to page 82*

Official United States Air Force Photographs

Filter center plots the location of all aircraft reported by the spotters. The farmers and their wives work in the filter center while others phone in the location of planes

Mobiloil's New Super-Detergent Formula

HELPS FARM ENGINES LAST FAR LONGER

YES, Mobiloil with new *wear-fighting action* can help save you many dollars on repairs, overhauls, oil consumed . . . keep your equipment on the job *longer*, even under the most severe operating conditions.

Dramatically demonstrated this new way—Radio-active piston rings are installed in test engines. "Hot" metal particles worn off the rings into the test oil are measured with hair-splitting accuracy by Geiger counter.

Result proves Mobiloil's new super-detergent formula drastically reduces engine corrosive wear . . . lengthens engine life. See your Mobilgas-Mobiloil man for new Mobiloil *today!*

● Use of radio-active piston rings makes it possible—for the first time—to measure engine wear with truly scientific accuracy.

Mobilgas
SOCONY-VACUUM

Call in your Mobilgas-Mobiloil Man for

NEW Mobiloil

SOCONY-VACUUM OIL CO., INC., 26 Broadway, New York 4, N. Y., and Affiliates: MAGNOLIA PETROLEUM CO., Dallas, GENERAL PETROLEUM CORP., Los Angeles

Don't put in a drop of anti-freeze

... until you've cleaned out rust with

DU PONT *Cooling System* CLEANSER

Now, before freezing weather sets in . . . before you put in anti-freeze . . . it's time to clean out your cooling system. **Du Pont Cleanser** makes the job safe, simple and thorough. You can even let the cleanser work while you're driving. And neutralizer is included in each can for a complete job. Du Pont Cleanser removes rust *—without reverse flushing*, without fuss. Get a can at your service station or auto supply store today.

Insure against leaks that waste anti-freeze with

DU PONT COOLING SYSTEM SEALER

Don't let radiator leaks rob you of valuable anti-freeze. Seal it in with **Du Pont Cooling System Sealer**. Even when the cooling system is apparently watertight, many permanent anti-freezes will "creep" and be lost by seepage through tiny pinholes. Such leaks are stopped immediately by Du Pont Sealer. It's simple to use, flows with the water in your system, and can't clog, or harm hose or metal parts.

DU PONT
REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

Air attack

From page 80

instruction in estimating altitudes and speeds of high-flying planes. Volunteers working in the filter centers are given 50 hours' schooling per year. Their duties are complex. The Air Force handles this training, while civilian defense agencies deal with administrative details.

Eagerness to learn and help is a basic necessity—and is doubly important in the filter center. This is the clearinghouse for all reported aircraft activity. To understand fully what happens here, let's look into a typical center controlling a Ground Observers Corps defense region.

At first glance it seems that the intent farmers, housewives, and businessmen are playing long-distance checkers. About 15 volunteers wearing telephone headsets are grouped about a plotting table.

This table is overlaid by a numbered, transparent grid map and shows the location of each observation post in the area. Movable cardboard markers show the position and type of each aircraft reported by these posts.

Spaced around the board are plotters, who change the markers to new positions telephoned in. As we watch, it becomes apparent that nothing is left to guesswork. Every move of the markers is followed by filterers. Their job is to double-check each incoming report, making sure the marker is correctly placed. This is highly important to a group of tellers seated on a platform above the table. They must relay exact information from the board to Ground Control Intercept stations.

This, then, is the setup of inner defense furnished by the corps.

For example, a farmer scans the sky and spots a tiny, moving object—a four-engine plane. He notes its direction, altitude, and speed. Then he hurries to his telephone.

"Air Defense, please." The operator immediately makes the connection.

"This is Air Defense."

"Give me Able Filter Center." A brief pause. "Hello Able. This is lookout post Able Charlie Two. Plane, four engines, speed about 300 mph, headed due east at 15,000 feet. That is all. Out."

"Roger," says a wheat raiser in the filter center. Quickly he fixes a marker on the board. The filterer double-checks it, then nods. "Position accurate."

Next, the tellers contact the Ground Control Intercept Station. "We have one four-engine plane approaching Critical Zone Three at speed 300 mph. Position 5 miles east of lookout post Able Charlie Two. Altitude 15,000 feet. That is all. Out."

Trained Air Force and civilian personnel carefully co-ordinate the report with similar data from radar detectors. They then have a disturbing picture. The plane is an unidentified bomber-type craft. And Critical Zone Three—a heavily populated industrial area—makes an ideal A-bomb target. Instantly this in-

formation is telephoned to a nearby Air Force base, where armed, radar-equipped jet interceptors take off.

Simultaneously, a civil air-raid-warning officer in a nearby Air Defense Control Center has computed the bomber's flight path. Now he must wait for the jets to report in. If the plane is hostile, he must alert the target area.

A "yellow" alert will be broadcast if the bomber is hostile and likely to attack. Key personnel will prepare for the "red" alert. This means attack is imminent, and that defense agencies will take immediate action to protect lives and property in Critical Zone Three.

Minutes tick by. Miles away and thousands of feet above the earth, the jets have pin-pointed the bomber and are swooping in for a closer look. The warning officer keeps his ear clamped to the telephone receiver, waiting for the squadron leader to report in. Then, from the jet leader comes the report:

"Princess One to Jester Four. Identification positive. Friendly aircraft. Out." The warning officer grins and looks at his charts. Fifteen minutes from the time the plane was first spotted, the jets were reporting it friendly.

Cooperation is the moving force in our round-the-clock defense against atomic attack. But this is not enough. The Department of Defense has made an urgent appeal for thousands of farmers to push the Ground Observers Corps nearer its national goal of 400,000 active members. You are needed. To take part in this program, contact your local civil defense office or state civil defense director. **END**

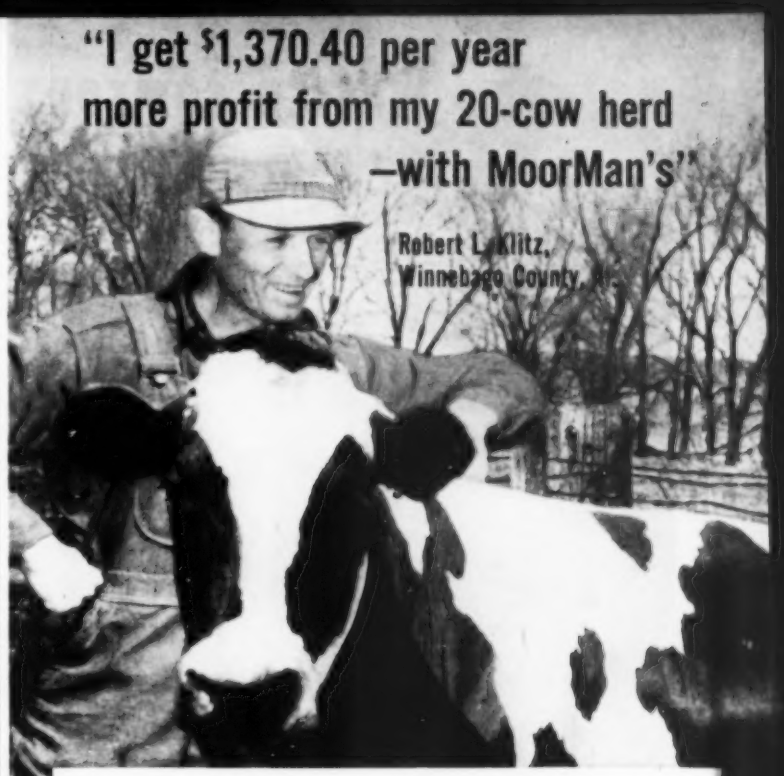
Brome, 2,4-D team against leafy spurge

Research at South Dakota State College has shown that seeding bromegrass in land infested with leafy spurge, then spraying with 2,4-D, will help kill spurge.

Since bromegrass is highly resistant to 2,4-D and spurge is less resistant, the spurge is killed back to the crown and the brome continues to grow.

Lyle Derscheid, South Dakota State College weed researcher, reports that $1\frac{1}{2}$ pounds of the ester form of 2,4-D per acre, applied when the upper leaves of spurge turn yellow, will kill the spurge plants back to the crown.

When the leaves grow back to the yellowing stage, they should be sprayed again. If the spurge plants are not killed the first year, spraying in the same manner the next year may be necessary to kill the leafy spurge.



"Cows now get more value from my grain and forage"

"Our DHIA records show our cows averaged 57.1 more pounds of butterfat in 1951 than in 1950," says Robert L. Klitz, Winnebago County, Ill. "Figuring butterfat at $1.20 a pound, that's $68.52 more profit from each cow, $1,370.40 for the herd.

"I'm confident that half of this increase was due to feeding MoorMan's Cow Mintrate for 10½ months of the testing year because MoorMan's seems to enable the cows to 'break down' my own grain and forage so they get more value from it. The other half of the increase was probably due to changing from corn silage to silage made of ladino, red top, alfalfa and clover.

"Our testing year ends Nov. 15, and our 1950 herd average was 465.3 lbs. We started feeding Cow Mintrate and our own grain on Feb. 1, 1951, and production increased until the cows made an average of 522.4 pounds of fat for the testing year. Production is still going up, for our April tests showed an average of 4.2 more pounds of fat than April last year. And that's an extra $100.80 profit for the herd for one month.

"I especially like oats for cows, and feed ⅔ oats to ⅓ corn. To make a ton of cow feed, I use 1,850 lbs. of grain and 150 lbs. of MoorMan's Cow Mintrate. This gives me a 14% protein ration. Cows get 1 pound for each 4 pounds of milk they give in winter, but only 1 pound for each 8 pounds of milk in summer."

You, too, can make more net profits if you switch to MoorMan's. You save because you buy only the feed you need to balance your own grain and forage—give you more feeding value from your own corn, oats, other grain, hay and pasture. Yes, switch to MoorMan's—see your MoorMan Man, let him explain Moorman feeding programs, keep accurate records, compare costs—and you, too, will be mighty happy with your good results. If no MoorMan Man calls, write Moorman Mfg. Co., Dept. R3-10, Quincy, Ill.

MoorMan's

(Since 1885)

MAKERS OF PROTEIN AND MINERAL CONCENTRATES FARMERS NEED, BUT CANNOT RAISE OR PROCESS ON THE FARM

FOR GOOD RESULTS WE FEED MoorMan's

WINTER COMFORT as you like it!

with

AREA HEAT

and the NEW Dearborn® Touch-Cool Guard-O-Matic GAS AREA HEATERS

DVRCK 45

HEAT WHERE YOU WANT IT—WHEN YOU WANT IT

the only vented, radiant, circulating heaters with Touch-Cool cabinets

This winter enjoy heating comfort *as you like it—where* you want it—*when* you want it—at lowest possible cost! With famous Dearborn Guard-O-Matic Area Heaters.

Revolutionary* NEW *Design!

America's *most wanted* gas heaters, the wonderful new Dearborn Guard-O-Matic models are the *only* vented heaters with remarkable Touch-Cool cabinets. So cool you can grow plants on top! Never hot on top, bottom or sides—can't harm furniture, rugs, walls, or careless little fingers.

New Black Magic Convector provides positive air circulation, even temperature, fast initial heat. New louver design circulates all heat from the front—no streaked walls, no soiled ceiling, yet quicker, more even—more comfortable heat.

Dearborn Gas Area Heaters—your wise choice for heating comfort *as you like it*. See your Dearborn dealer—soon.

DVRCK 45

DVRCK 30

Available in 30,000, 45,000 and 65,000 Btu input capacity models.

Approved by American Gas Association for use with all types of gas, including LP-gas.

FREE! "The Story of Area Heat"—an interesting, informative and helpful booklet. Fill out and mail the coupon for free copy.

Only the Dearborn Guard-O-Matic has all these features!

- Amazing Touch-Cool cabinet—top, bottom, sides never hot to the touch.
- Black Magic convector for positive air circulation—even temperature.
- Famous High Crown burner—gets more heat from fuel for greater economy.
- Glo-Brite radiants—for more efficient combustion, more radiant heat.
- Automatic lighting with 100% safety pilot.
- Automatic controls—choice of four types for most convenient operation.

DEARBORN STOVE CO.,
5830 N. Pulaski Road, Chicago 30, Ill.

I'd like to know more about area heating. Please send me a free copy of your booklet "The Story of Area Heat."

Name _____

Address _____

Town _____ State _____

World's finest, safest gas room heaters

Dearborn® STOVE COMPANY

Chicago, Illinois • Dallas, Texas

Substitute sow's milk

From page 49

shed after being taken from the sows. Heat was supplied by an ordinary brooder stove, and 70 pigs were divided among 4 pens. Temperature in the shed was kept at 70 degrees.

Although this hog raiser lost some spring pigs, he planned to use the substitute milk again in the fall when field work would be taking less time. That's another angle Raymond commented on. "Maybe feeding substitute sow's milk would be less work for a big operator or a pig hatchery, but it wasn't for me.

"You've got to keep all the utensils clean as well as the shed. And, in my case at least, I had to hand-feed the pigs—which takes a lot of time. In the fall I'll have more time and I'm sure I can do a better job than I did last spring. Like anything new, it's going to take time for farmers to learn how to use this milk."

This Illinois farmer is enthusiastic about the way sows can be handled when substitute milk is fed to the pigs. His sows dried up quickly after the pigs were taken from them at 3 days of age. And, because the pigs were left with the sows for such a short time, the sows weren't "sucked down." The sows were in excellent condition, and Raymond sold them soon after farrowing when the market was good.

Much has been said about the possibility of rebreeding the sows within a week after farrowing. Some farmers have had excellent results—others not so good. Raymond turned the boar in with his sows as soon as the pigs were taken from them. Because he sold the sows a month after they farrowed, he isn't sure how many were bred. However, he didn't think many of the sows were bred the first week after farrowing.

Another Illinois farmer, Dale Sieben of Geneseo, raised about 90 pigs on the substitute milk. Dale took the pigs away

> **It often shows fine command of language to refrain from using it.** —*Anonymous*

from the sow when they were 2 days old. The pigs were housed in a poultry house.

For 3 or 4 days after the pigs were taken from the sow, Dale kept them in a tiered brooder. Then he took them out of the brooder and put them in pens in the heated poultry house.

For the first week, Dale fed 1 gallon of the milk for every 10 pigs. He increased the feeding 1 gallon per week. The milk was diluted more than the directions called for, because, when it was fed at recommended strength, the pigs vomited and scoured.

"Feeding pigs on substitute sow's milk meant more work for me than when the pigs were left with the sow," Dale said. "However, I was new at the game, and if a farmer were set up right, I don't think

[*Turn to page 86*

"Willie wants to be President!

"Of our Student Council, that is.

"That's him over there, passing out his campaign handbills like an alderman passing out cigars.

"Our school elections used to be pretty dull. You know, a couple of funny posters put up in the halls, and that was about it.

"But our new Civics teacher, Mr. Leszczynski, has a theory that we'll learn a heck of a lot more about government and Americanism if we have less reading and more *doing*.

"He started out last year by making two school Parties . . . conventions, platforms and all that. And, while we had a lot of fun with our elections, we learned a lot about government at the same time. We've even got a regular Congress . . . with teachers in our Senate and us pupils in our House of Representatives. All elected by us, too.

"One of the things Mr. Leszczynski keeps drumming into us is the Bill of Rights of the Constitution. He's pretty hot on the subject of our Freedoms . . . religion, press, speech and the rest. He practically *begs* us to appreciate those Freedoms *every* day of our lives, not just on the Fourth of July and on Thanksgiving Day.

"He's not so dumb, either. He must've figured we'd sort of take our lessons home and pass them along to our families. 'Cause since he came to our school, our Parent-Teacher's meetings have been standing-room-only.

"And last regular Election Day in town, more'n 80% of our parents voted. I know both of mine did . . . and so did my big brothers and sisters.

"The funny part about it is . . . *Mr. Leszczynski wasn't even born an American!* But he never misses a chance to vote or take an active part in civic affairs. And he keeps reminding us he had to come to *this* country to find out what Freedom really means.

"To show you what us kids think about him . . . he's the *only* teacher we don't have a nickname for behind his back."

REPUBLIC STEEL

Republic Building • Cleveland 1, Ohio

Republic BECAME strong in a strong and free America. Republic can REMAIN strong only in an America that remains strong and free . . . an America whose vast Agricultural Industry is unsurpassed. *And through Agriculture, Republic serves America.* Republic's wide range of farm products includes steel roofing, siding, fencing, barbed wire, fence posts, nails, bale ties, corrugated metal culverts and sectional plate pipe and arches. Republic steels are found in thousands of farm tools and machines for field, pasture and homestead. Through its Agricultural Extension Bureau, too, Republic works closely with the farmer and his problems to help keep America the best fed nation on earth.

* * *

For a full color reprint of this advertisement write Dept. C, Republic Steel, Cleveland 1, Ohio

AC Spark Plugs won't misfire when your tractor is pulling its hardest. They help it "over the hump," because they stay cleaner and more efficient. That's because only AC has the patented *CORALOX* Insulator—the greatest spark plug improvement in over 40 years.

Here are some of *CORALOX*'s advantages over all previous insulators:

- wider heat range
- greater strength
- better electrical insulation
- greater resistance to fouling
- longer spark plug life

AC Spark Plugs are original factory equipment on more new cars and trucks than any other make of plug. They are so rugged—so sure-firing—so long-lived—that they give superior service in car, truck or tractor.

AC SPARK PLUG DIVISION GM GENERAL MOTORS CORPORATION

Substitute sow's milk

From page 81

it would take any more labor. The big thing as I see it is in keeping everything clean. I used a steam cleaner on the brooder, and I also steamed the troughs every few days," Dale added.

On this farm, the pigs were weaned at 5 weeks. Feeding the substitute milk got the pigs onto a creep ration much sooner than when the pigs were left with the sow.

As soon as Dale took the pigs away from the sows, he turned the sows in with the boar. Every one of the 12 sows was rebred *within a week after farrowing*.

This hog raiser plans to use substitute sow's milk again. "I probably won't put all my pigs on the milk next year, but I'm certainly going to use it for extra pigs from big litters. I also plan to use it for feeding orphan pigs and pigs from a poor-milking sow," Dale said.

Howard Greiner, Wellman, Iowa, is convinced that in order to do a good job of raising pigs on substitute sow's milk, the pigs will have to be put in a brooder.

"I tried raising them in pens, but it just didn't work for me. The pigs got wet and chilled, and then scoured. My farrowing house is heated, too, but I still couldn't keep the pigs or the pens dry."

Howard raises 1,200 to 1,500 pigs a year. And he thinks substitute milk is the coming thing for his size of operation. Again, this farmer, like many others, feels that management holds the answer to success with substitute-milk feeding.

"The products themselves may be improved as we learn more about them, but we're going to have to learn how to use these products right or it won't make any difference how good they are," he said.

"I tried taking the pigs away from the sow at different times. From my own experience, I think it's best to leave the pigs with the sows for about 5 days. At first, I tried using a poultry fountain for a feeder. It didn't work. The pigs got too wet. Then I tried a brooder with an automatic feeder that kept the trough full of milk all the time. That didn't work, either. The pigs overate, got potbellied, and scoured.

"I finally ended up by hand-feeding the pigs in the brooder. It's a job to keep the pigs warm enough even in a brooder. My hog house is heated and I used heat lamps in the brooder, too, but the pigs seemed to be cold even then.

"I'm going to try feeding the milk again this fall when I have more time to take care of the pigs. It takes a lot of time the first couple of weeks. I don't plan to put all my pigs on the milk until I know a lot more about it than I do now."

As stated at the beginning of this article, substitute-sow's-milk feeding probably won't mean the end of pig-raising troubles for everybody. The farmer who has trouble doing a good management job when pigs are left with the sows will probably have as much or more trouble with substitute-sow's-milk feeding.

At the present time, the following points seem most important for success with substitute-sow's-milk feeding:

1. You'll need a heated shelter. It can be your regular farrowing house, poultry house, or barn. And even with central heating, you'll probably need heat lamps—at least for the first week or two.

2. You'll need special feeding equipment. Troughs with partitions, poultry waterers with partitions, or regular pig brooders are being used. The important thing is to make sure that every pig has a chance to get his share of the milk. Use the feeding equipment that keeps your pigs as dry as possible.

3. Follow the manufacturer's directions for mixing and feeding the milk. Although you may want to use different mixtures and feeding periods later, start off using the milk by following all the manufacturer's directions.

4. Have a definite plan in mind for keeping the equipment clean and sterilized. Be especially careful the first 2 weeks. Keep the pens or brooder as clean and dry as possible. Do a thorough disinfecting job before putting new pigs in a pen or brooder used for a previous bunch.

5. Put a good creep feed before the pigs when they are a few days old. The pigs start eating a creep ration sooner when fed the substitute milk than when left with the sow.

6. Make sure the pigs have plenty of clean water before them at all times. Many farmers say pigs on substitute milk start drinking water much sooner than when left with the sow. And the pigs taken from the sow seem to need *a greater quantity* of water, too.

7. There seems to be no agreement among farmers as to the best time to take the pigs from the sow. Some take the pigs away at birth; others leave them with the sow for a week or longer. You'll have to decide for yourself when will be best for your pigs and for you.

8. When you wean the pigs depends upon the pigs themselves. Some farmers wean at 5 weeks—others keep the pigs on the milk longer. It depends pretty much upon when the pigs are eating goodly quantities of the creep feed. Again, you'll have to let the pigs tell you what's best for themselves.

9. From all indications, you'll have fair success rebreeding your sows a week after farrowing. But don't count on 100-percent success. If the sows are in good condition when the pigs are born, you can count on their staying in good condition, because the pigs don't suck over a long period. That's a big advantage if you plan to sell the sows soon after farrowing.

Although the points mentioned here are important, they won't cover all the phases of feeding substitute sow's milk. Nearly all the points mentioned have something to do with *good management*.

If you want to use substitute sow's milk, take a good look at your past pig-raising ability. Management, more than the pigs or the product you use, will mean the difference between success or failure with substitute sow's milk. **END**

DON'T LET THE *wind* ROB YOUR SAVINGS

Whoosh . . . as quick as that, a heavy windstorm can rip off a roof, endangering the whole building and threatening its contents. Even if you're fully insured, storm damage can cost you hundreds of dollars in inconvenience, delays, and lost profits as well as actual cash outlay.

That's why Ruberoid designed Tite-On shingles with a special interlocking device that gives each shingle a tight grip on four adjoining shingles. In addition, four concealed nails hold each Tite-On to the roof deck. It is virtually impossible for the wind to get under this roof and pry up shingles. Over the past 19 years, many gales, hurricanes and tornados have produced dramatic evidence of Tite-On's exceptional wind resistance. In the wake of these violent storms, not a single case of a wind-damaged Tite-On roof has been discovered.

Ruberoid Tite-On shingles provide an unbeatable combination of wind resistance, distinctive beauty, double strength and fire resistance for new roofs and re-roofing over old shingles. If you would like more information on protecting your farm buildings (and your savings account) from wind damage, fill in and mail the coupon below.

Tite-on Shingles

The RUBEROID CO., 500 Fifth Ave., New York 36, N.Y.

☐ Please send free booklet on Ruberoid Tite-On Shingles

☐ I am interested in shingles for new roofs. ☐ Re-roofing

Guaranteed by Good Housekeeping

NAME

ADDRESS

TOWN STATE

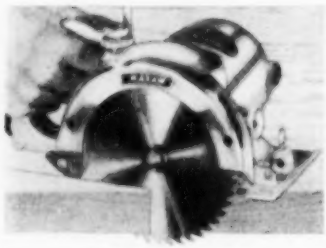
SF-10

The RUBEROID Co.

ASPHALT AND ASBESTOS BUILDING MATERIALS

On farm building, repairing

does the work of $115 to $125 saws



Heavy Duty — All Ball and Roller Bearing — Industrial quality

only $69.50

MAXAW 700

with magicopivot

Speed up all farm repair and maintenance on buildings and equipment—the easy way, with this first truly practical "electric handsaw." You cut angles, bevels, ends and joints exact and accurate; zip through all lumber including 2 x 12's *with blade to spare!* Maxaw 700 does the work of saws costing up to $125.00.

Exclusive **magic • pivot** gives you this amazing cutting capacity, easy-handling weight of only 10 lbs., and bed-rock prices!

Your saw blades last twice as long, stand three to four more sharpenings, put more power where it's needed—at the cutting edge.

Compare amazing Maxaw 700 with other saws, in the chart below—

HERE'S PROOF—magic • pivot does it!

NAME	BLADE DIA	WEIGHT	CUT AT 45°	STRAIGHT CUT	*PRICE
MAXAW 700	6-1/8"	10 lbs.	1-1/8"	2-1/16"	$ 69.50
Saw A	7-1/4"	15-1/4 lbs.	1-3/4"	2-1/8"	$122.50
Saw B	7-1/2"	15 lbs.	1-21/32"	2-1/2"	$125.00
Saw C	7-1/4"	15 lbs.	1-7/8"	2-1/2"	$125.00
Saw D	7-1/4"	16 lbs.	2"	2-1/4"	$115.00

This is your proof of **magic • pivot** *performance*. Competitive prices quoted were as of January 1, 1952. Saws A, B, C and D are priced only with cases. MAXAW cases, if wanted, $10 extra.

See and try this best farm "electric handsaw" value at your nearest hardware or farm implement store . . . today.

Cummins

Cummins-Chicago Corp.
4740 N. Ravenswood, Chicago 40
334 Lauder Ave., Toronto 10, Canada

Paring knife | Utility knife | Bread slicer | Ham slicer | Carving knife | Butcher knife

What to know about knives

By Jan Maple

There's a knife made to suit every household use. Learning to know each knife and how to use it can make many kitchen tasks less tedious.

Bare essentials are a paring knife and a general-purpose slicer (carving knife). But all eight of the knives shown on this page should eventually be included in your cutlery "wardrobe."

A paring knife is perfect for the little jobs—peeling peaches and removing "eyes" from potatoes. Its short length makes it easy to control while the sharp tip is being used.

A bread knife is shaped like a carving knife, but its serrated (saw-toothed) edge turns out a finer slice of bread.

The ham slicer, having a long and narrow blade, is best for boneless, or

[*Turn to page 90*

Boning knife has thin tapering blade and pointed tip—a necessity for home butchering and ideal for boning roasts and chickens

Photographs: Fletcher

French (or chef's) knife is best, safest for chopping. Pivoting from the point of blade, move knife in a half-circle pattern

His footprints are all over northeast Oklahoma

This is Otis Lee Saunders, or just plain Lee to farmers and stockmen near Miami, Oklahoma.

He's a telephone man—been with the Bell System thirty-five years. For more than twenty-eight years he has been the manager at Miami. Few people know the farms hereabouts and the men who work them as well as he does. Truly, his footprints are all over that section of Oklahoma.

Being a telephone man, Lee is especially aware of the importance of telephone service to farmers. Along with his fellow workers, he has done an outstanding job of looking after the telephone needs of his farm friends and customers.

Like Lee Saunders, Bell telephone men in your community are your neighbors and friends, with a genuine interest in helping provide you with more and better telephone service.

BELL TELEPHONE SYSTEM

No matter what the weather!

THE RIGHT TEMPERATURE INSIDE WITH

Waterbury

Waterbury **FURNACES**
WINTER AIR CONDITIONERS

How many times have you thought, "I certainly dread the cold winter months." One good way to eliminate cold weather troubles in your home is by installing a Waterbury furnace or winter air conditioner.

When you choose Waterbury warm air heating, you can be sure of dependable, economical, trouble-free heating comfort for many years to come. What's more, you'll enjoy winter weather because no matter what the weather is *outside* you can always have the *right* temperature *inside* with Waterbury.

There's a Waterbury for every size home and every type of fuel.

OVER 45 YEARS OF WARM AIR HEATING

THE WATERMAN WATERBURY CO.
1184 JACKSON ST. N. E. • MINNEAPOLIS 13, MINNESOTA

Please send me the heating guide, "It's So Important" and the complete folder of Waterbury units.

NAME _____

STREET OR RFD _____

CITY _____ ZONE ____ STATE _____

"It's What's UNDER the Casing that Counts!"

What to know about knives

From page 88

Utility knife, with pointed and pliable blade, is for peeling, sectioning, slicing, and other jobs too big for a paring knife

nearly boneless, roasts. The rounded end cannot catch and tear thin slices. Cold or leftover meats can be sliced thinly with the narrow blade without clinging.

A carving knife is best suited to slicing hot meats. Its tapered end is for trimming around bones.

The butcher knife is needed for cutting large pieces of raw meat, watermelon, big cabbages, squash, and eggplant.

Buy good knives. A knife blade must be made of hard steel if it's to hold a keen edge. Whether you buy a plain steel knife, or one of the stainless type, insist on getting the hardest steel available. Over-all good construction of the knife and the reputation of dealer and manufacturer are the most practical clues to quality. You can be reasonably sure a *good* knife will not be cheap.

Take care of your knives—they cannot withstand neglect or abuse. Keep knives sharp by *frequent* use of a steel or carborundum. (Watch your butcher to learn how to use a steel.)

Keep knives in a slotted holder that hangs on the wall or fits into a drawer. Knives just tossed into a drawer will be dulled by banging against each other and against other tools.

Wipe off your knives after each use. Leaving knives damp—especially with acid foods—dulls the blades. Prolonged exposure to moisture and heat may damage the handles, too. Always cut on wood or other soft surfaces which cannot nick or dull the blade. And most important: Keep one *old* knife and a pair of sturdy shears handy for opening cardboard food packages, cutting string, and all such jobs that are ruinous to good knives.

One sign of a well-made knife is a tang (end of the blade) that extends the whole length of handle, is securely riveted. END

More Pleasure in Every Mile!

More Miles in Every Gallon!

Dollar for Dollar You Can't Beat a Pontiac!

See your nearest Pontiac Dealer and drive this great new Pontiac yourself —it's a revelation!

So much more driving pleasure awaits you the minute you get behind the wheel of a beautiful new Pontiac!

First of all, there is the downright pleasure of driving this spirited, eager Dual-Range* performer. You'll find yourself conquering the toughest traffic with astonishing ease.

And on the open road, in Pontiac's Cruising Range, you'll sail along so smoothly, so quietly, with so little effort that every trip you take will seem hours shorter.

Another great Pontiac plus is real, day-by-day economy. For instance, Pontiac's new economy rear axle *reduces engine revolutions as much as 30 per cent* in Cruising Range—adds plenty of miles to every gallon. And, of course, you know Pontiac's renowned record for carefree dependability year after year.

See your nearest Pontiac dealer and learn how little it costs to own a Pontiac—the car that gives you *so much more of everything!*

*Optional at extra cost.

A GREAT GENERAL MOTORS VALUE

PONTIAC MOTOR DIVISION OF GENERAL MOTORS CORPORATION

The great land

Good land isn't always where you find it—it's where you* make *it!

Alert farmers are buying "poor" land and harvesting record crops

Today, farmers throughout America are literally changing the face of the earth.

They're taking thin-soiled hills, swamps, and deserts—*and turning them into profitmaking farms!*

It's a relatively new thing—this trend toward using poor land. But the capital now needed to buy good land is so high many farmers can't afford to buy it.

Meanwhile, our expanding population is creating a rising demand for farm products. The demand must be met and it can't be met by putting more good land under cultivation. There's none left.

There is a solution. Modern farmers can't load up the Conestoga and hit the Oregon Trail—*but they can follow the trail blazed by modern agricultural research* and remake poor soil into profitable farmland. Plenty of poor land is available.

With the help of modern machinery and techniques, many American farmers are turning from premium-priced "good" land to low-cost "poor" land. It takes work, money, and know-how to develop it, but it pays off. These men say, "Poor land is the year's best buy."

And around the country things are cracking. Tractor exhausts on sandy hillsides—gasoline motors on irrigation pumps—leaping flames in brushy arroyos. And not the least of the cracking sounds is the soft riffle of crisp greenbacks in the farmer's pocket—his "poor" land profits so long as cattle prices stay good.

Wise men insist a buyer of such land have the equivalent of the purchase price in liquid assets for development costs and emergencies.

Here's what they're doing around the country:

Missouri; Ovid Bay reporting:

Missouri used to be considered the southern fringe of the Cornbelt—if the speaker were kind. More often, it was referred to as the beginning of the Ozarks and the home of the long-eared mule!

Today, since the coming of chemical fertilizers and improved varieties of crops, Missourians are spending from $30 to $50 an acre for plant food. And they're raising more corn, wheat, soybeans, oats, and pasture per acre in many instances than their neighbors on the west, north, and east—who are on land that costs two to four times as much as Missouri hills.

"Test-guided fertilization of the soil" is really the key to making thin or poor land into medium-to-high-producing land. One of the leaders in the Midwest in this movement has been Dr. Arnold Klemme, extension soils specialist at the University of Missouri and former county agent in the southern half of the state.

He says, "The most helpful single development has been that of the chemical soil tests. Every farmer in the state now has a soil testing laboratory in his county, or an adjoining county, where he can take his soil samples for analysis!"

Soil testing is no guessing game in Missouri. Field tests are conducted each year in many Missouri counties with cooperating farmers. In seven comparisons on neighboring plots on an Ozark border soil in Gasconade County, where *full soil treatments* were made in accord with soil tests, the average yield of corn was 101 bushels per acre!

Missouri has slightly over 11 million acres of land used as permanent pasture. Because of low fertility, much of this area is infested with broom sedge, tickle grass, and other vegetation that leaves a hungry cow still hungry. By the correction of soil fertility deficiencies, renovation, and reseeding (at a cost of $30 to $75 per acre if some bulldozing is necessary), this nonnutritious vegetation is replaced with protein- and mineral-rich grasses and legumes, and grazing season is lengthened, the livestock carrying capacity is greatly increased, runoff of rainfall is retarded, and the soil erosion reduced to a negligible amount. Protein yields have been raised from 196 to as high as 540 pounds per acre. Beef production has been increased from about 150 to 300 and 400 pounds per acre, while milk production in southwest Missouri has been increased from about $^3/_4$ to 3.5-5 tons per acre!

Chester Boston, 44-year-old feeder-pig producer in the

rush of 1952

South Missouri Ozarks, left the highly fertile area of Pawnee, Illinois, two years ago to move to the timbered and run-down 430-acre farm he purchased in Ripley County.

The cutover oak land didn't have any improved or renovated pasture a year ago, but Boston spent $30 an acre last fall fertilizing according to soil tests and seeding a mixture of fescue, orchard grass, and Ladino clover on a 15-acre field. He had 4 sows when he moved to the farm. He now has 13 sows and plans to increase the herd to 25 in the near future.

When asked if this $30-an-acre treatment wasn't prohibitive, Boston said, "This was the best money I could spend. By adding this $30 an acre to land that costs from $25 to $50, my production in pounds of livestock gain on pasture is as much as on the $200 and $300 land in the Cornbelt."

Ohio; Delmer Groves reporting:

Thousands of acres of once marginal land in the hills of Ohio, West Virginia, Kentucky, and eastern Pennsylvania have been changed into productive soil.

There are three reasons why this land, once considered worthless for farming, is staging such an amazing comeback. No. 1 is America's vanishing frontiers. This has focused attention on hills once considered too steep to be able to add anything to the nation's food potential. We are faced with a growing population and must find more food.

The second reason is the development of techniques and systems of farming which fit the type of land. Such things as sod mulch, grassland agriculture, grass-fat cattle, and greater knowledge of the powers of lime and fertilizer can help return these acres to production.

The third reason is purely economic. We have the money to do it. Returns from farming are such that it is possible to renovate land in order to grow products and still sell them at a profit.

Trash-mulch seeding is probably the most important technique in bringing the poorest marginal hill land back to valuable production. But it has not done the job alone. Other techniques which play a big part are diversion ditches, contour strip-cropping, terracing on milder slopes, and reforestation on the steeper slopes. Long rotations which contain no more than one year in a row crop but several years in meadow are very important.

C. R. Clawson renovated a 10-acre field in Morgan County, Ohio. It had bushes 10 feet high and gullies almost that deep. The brush was bulldozed into the gullies and the land leveled over with a lot of hand-grubbing required. A tandem disc and smoothing harrow worked the field over for two days. Lime trucks spread 50 tons of finely ground limestone on the 10 acres. Then it was seeded by grain drill to alfalfa, clover, timothy, and redtop. Three tons of 3-12-12 fertilizer was drilled on the field.

It cost Clawson a total of $564.56, or more than $56 an acre. Clawson says, "This looked like a big investment at one time but I wouldn't take double that amount for it now."

Clawson and other farmers have found that fields seeded by the trash-mulch method will yield up to 6 tons of hay per acre. Other yields are in the same vein when enough fertilizer, lime, and manure are used.

A lot of this poor land has been selling for back taxes. In other areas it has sold for $8 to $25 an acre, and the man who bought it was thought foolish. After renovation, such farms may sell for $100 an acre.

Michigan; Wayne Swegle reporting:

A new agricultural frontier is being blazed in northern Michigan and parts of Wisconsin where the first frontier passed long ago.

Millions of acres of loamy sands, some fairly level, some hilly, are being put back into profitable production. A few years ago the land wouldn't support family units.

Knowledge of how to handle these soils developed in land-grant college experiment stations. First step in putting vitality back into the soil is an application of 2 to 3 tons of lime to the acre. Second step is a rigorous green-manure program to build up the organic matter. A typical program is a year or two of buckwheat in the summer, and rye in the winter, applied with 300 pounds or more of a complete fertilizer with each seeding.

With careful handling these soils will produce respectably. Fertilizer must be applied each rotation and a legume-grass seeding should be on the land at least half the time. Farmers are careful to [*Turn to page 94*

The great land rush of 1952

Continued from preceding page

keep the soil covered with rye during the winter to prevent leaching and erosion, and to add organic matter for the next crop.

Farmers from other areas to the south are invading northern Michigan and Wisconsin to try their hand at farming. The land is cheaper—as low as $10 an acre for some unimproved land. Farmers who have rejuvenated this land estimate it takes about $45 an acre to get the land into shape for profitable production.

There are some disadvantages. If the farms haven't been worked recently, the improvements on most of them are in poor repair. Income for the first few years is apt to be small. Investment in machinery is nearly equal to that in areas of rich farmland. Fertilizer requirements are high.

For much of the region, potatoes as a cash crop and dairying to utilize the roughage work as an ideal combination. Cheese factories and milk outlets abound in the area. Houghton County, one of the farthest north in the United States, has a million-dollar dairy-cattle industry.

Extension specialists say that 200 acres is a minimum, with a larger farm more desirable because half of it must be kept in a soil-building program. But 160 acres of good Midwest farmland probably would cost $50,000 or more. Even if you paid $50 an acre for some of this northern Michigan land, you could get 300 acres for $15,000.

New York; Richard Bradfield reporting:

The Northeast is usually regarded as an area with a decadent agriculture and large tracts of abandoned land. Many have the idea these farms were abandoned because they were worn out. This is by no means true.

When the farms of the Northeast were being abandoned, food was plentiful and cheap. Wages in the city were more attractive than those on the farm. Life on a Northeastern farm was full of hardships.

Now Northeastern agriculture is entering an era of renaissance. Competing land in the West is expensive and tightly held. Industry is spreading into all sections of the country, and farmers in the South and the West are facing increasing competition for labor. It is not spreading as rapidly in the Northeast. The cost of shipping farm products from surplus areas in the West to deficit areas in the East is increasing. A dairy ration for which an Illinois farmer received $42 per ton in 1949 cost the New York dairy farmer $72. The difference of $30 was absorbed in transportation and handling charges.

With the small farms of 25 to 50 years ago, mechanization was hard to justify. With larger fields, larger farm units, cheaper electricity, better roads, and more efficient machinery, the situation has completely changed.

The yields of most crops in the Northeast compare very favorably with those obtained in most other sections of the country. Summer rainfall as a rule is *more* favorable, and as a result, fluctuation in yields because of drouth is not common. Much of the land is still poorly drained, but progress is being made in developing less expensive methods for improving the drainage of the hill lands. A can of milk buys more land, more lime, more fertilizer, more drainage, but less feed, than it did a generation ago. The moral is clear.

The dairy farmer of the Northeast knows home-grown forage is the cheapest source of nutrients for his cows. As he improves the quality of his pastures, hay, and silage, he can reduce his consumption of concentrates. In order to grow this high-quality forage, he must use more fertilizer and maintain a higher proportion of legumes in his pastures.

In the future it appears likely the Northeast dairy farmer will increase his profits by cutting his feed bill in two ways: (1) He will feed less grain per pound of milk because of improvement in his forage and (2) he will grow a higher proportion of the grain he does feed.

North Carolina; Frank Jeter reporting:

Southeastern landowners have learned there is no such thing as worn-out soil. The term "plundered planet" means little in this part of the United States when farmers can take a system of crop rotation, and by terracing and sod farming, rebuild an exploited field.

Research designed for this area is helping to do the job. A year-round grazing season—when supplementary crops are planted to piece out the regular permanent pastures—40 to 60 inches of rainfall a year, and full cooperation of all agricultural agencies are getting results.

Beef-cattle production is a "natural" for North Carolina farmers. A good Ladino pasture with fescue can be allowed to grow without being grazed through August and September and will provide grazing all winter for beef cattle. If hay is needed, clippings taken from the pasture earlier in the spring can be used to supplement the grazing. Ryegrass, crimson clover, or the cereals provide abundant grazing for late fall and early spring. That's why beef-cattle numbers jumped over 11 percent in 1951.

Land values in this section of the country have increased 11 percent compared with 9 percent for the entire nation since March, 1951. This increase in the value of land has been going on for some time as the new ideas in better farming move steadily across the Southern states.

The renovation technique of converting an old, eroded crop farm into a modern dairy- or beef-cattle farm is relatively simple. Heavy equipment, sometimes owned by the county but usually hired at custom rates, is used to push over scrub pines and oaks, fill up gullies, and

smooth over an acceptable seedbed. Land that was in pines on Monday can be planted to corn on Friday of the same week.

Many counties own their own bulldozers and terracing equipment. County-owned equipment does the work for individual farmers at the actual operating cost of the machines and the labor of the operators. This is as low as $5 an hour in some counties. A seedbed can be prepared for $20 to $100 an acre, depending upon the condition of the raw land.

Agricultural economists at North Carolina State College say an acre of pasture can be established for around $47.40, *exclusive* of the work done by the heavy equipment and the cost of the fencing. A pasture can be maintained at a yearly cost of around $25 an acre, *including* the expense of clipping and top-dressing with fertilizer.

Georgia; John Sanders reporting:

The Yankees are moving south. Here's one reason why: Georgia, Alabama, Florida, and bordering states have some of the best land buys in the nation.

The new livestock industry in the Southeast is developing on two types of soil areas. The first is the so-called wasteland consisting of land formerly covered with palmetto, scrub oak, and cutover pines. This land had been largely abandoned, and is usually classed as cheap land, with a value of $20 an acre or less.

The second type of soil area covers land formerly in cotton or row crops which has been converted to pastures for livestock. This land is more expensive, but the price would not ordinarily exceed $40 an acre.

The climate is highly suitable for pasture and livestock production. There is a long growing season, plenty of rainfall (*most years*, they'll tell you ruefully—after last summer's long drouth!), and availability of water for drinking and irrigation.

Florida, with its year-round growing season, is fast becoming one of the nation's leading cattle states. Good pastures are the reason.

Gross and net incomes per acre will vary, but on much of the land the average farmer can produce 150 to 200 pounds of beef per acre per year. This will be produced largely from pasture with some supplemental hay produced on the farm, with little or no concentrate feed. It provides a reasonably good net income, and there are farmers who have paid for the improvements to the land with the first year's beef production.

At present, an excellent opportunity presents itself for folks who want to get into farming. Especially those who are interested in low labor-requiring undertakings. Living conditions in this area are excellent. The states are spending twice as much money on schools as they were a few years ago, numerous hospitals have been built, and road-building plans are progressing satisfactorily.

The renovation technique necessary to bring the land into pasture production will vary, depending on the area. In some sections covered with trees or underbrush, it is necessary to use a bulldozer. This means rather expensive renovation. In other areas where the cover is not so heavy, ordinary farm machinery can bring about this renovation at much lower cost. Renovation is relatively cheap on land that recently has been in row-crop production. The cost varies from $1 to $25 an acre.

To this one must add the cost of liming and fertilizing, of seeding and fencing. This may vary from $30 to $40 an acre. The final cost is that of stocking the land, which is about the same here as elsewhere. From 300 to 1,000 acres is necessary for a successful livestock unit.

Nebraska; Carl Deitemeyer reporting:

Dramatic agricultural changes have come to the Western Great Plains in the last decade. Islands of the new and improved agriculture can be found from the spring-wheat plains of the Dakotas to the hot Panhandle of Texas.

"Poor" and "medium" land, much of it still in a virgin grass state, and other land still in the "honeymoon" period of farming or ranching, are being ardently wooed by folks who have foresight and capital.

There will be 1½ million acres of irrigated land in Nebraska. Some of the finest soils in the world are found in this "forgotten" area. With irrigation, comes production of row crops—corn, beans, sugar beets—grass seed, and irrigated pastures. Barnyard manure is an important element in the land's fertility program.

On newly developed land, sagebrush clearing costs will run from $10 to $50 per acre. This is above the initial cost of the land, which will average from $20 to $60 an acre.

Where underground water exists, sprinkler-type irrigation systems work well on rolling ground. With the cost of wells and equipment, these systems will cost from $2,500 to $5,000, depending on size and types of units. Size of units may vary from 20 to 40 and as high as 160 acres and more.

On new irrigation developments sponsored by the Bureau of Reclamation and the Soil Conservation Service, units will vary from 80 to 120 acres. The owners, mostly veterans, have 40 years to pay off. Payments are nominal and interest rates are low. Initial land costs are figured on the "long-pull" land-price average. The Mirage Flats development, near Hay Springs, Nebraska, is an outstanding example of a government tailor-made project.

Some ranchers have developed "branch offices." They raise cattle on the grass of the range and send their surplus cattle to irrigated pasture. Clark Jeary has an operation of this type. He couldn't purchase additional ranchland in large enough units to help him, so he bought land near Lincoln, sunk several wells, and put the land to brome-alfalfa where his surplus Angus are butterball fat. His ranch and farm units are 300 miles apart.

Texas; Bill Durham reporting:

The Southwestern area of the United States has about every natural agricultural problem. There is land too dry to farm profitably and land too wet during many months of the year. [*Turn to page 96*

BEWARE

of this tank destroyer...

Be Safe with A.O. Smith Permaglas®

AUTOMATIC WATER HEATER

Look out for "Ruthless Rust." He wrecks thousands of water heaters every year.

You know, better than anyone, that rust ruins implements, tanks, and tools.

Be Safe! Insist on an A. O. Smith *Permaglas* automatic water heater . . . the *only* water heater with glass-surfaced steel tank that can't rust because *glass can't rust.*

Be sure you have abundant, instant hot water for all your farmyard and household needs . . . hot water that's always as crystal clear and clean as your water supply. Insure against hot water failure, needless expense caused by a rust-eaten tank, with a *Permaglas* water heater on your farm.

Permaglas automatic water heaters are available in 20- to 80-gallon sizes in Gas, LP-Gas and Electric types. AGA and UL approved.

COST NO MORE than ordinary water heaters

THE ONLY WATER HEATER WITH Four B.I. PROTECTION

Four Basic Improvements, provided by A. O. Smith

1. Glass surfaced steel tank can't rust because *glass can't rust.*
2. Absence of dissimilar metals inside tank.
3. Interior tank fittings shielded from electrolytic action, the cause of all corrosion.
4. "Neutrolizer" . . . the anti-corrosion stand-by protector.

For free copy of "MURDER IN THE TANK" illustrated booklet, write A. O. Smith Corp., Dept. SF-1052, Permaglas-Heating Div., Kankakee, Ill. *International Division: Milwaukee 1, Licensee in Canada: John Inglis Co., Ltd.*

A.O.Smith

PERMAGLAS-HEATING PRODUCTS

Manufacturers also of: Gas fired home heating boilers, warm air furnaces, gas conversion burners, LP-Gas systems and carburetion adapters.

Land rush

From page 95

Old farmland can be bought for $50 an acre. Another $40 to $50 will establish improved pastures which can produce 300 to 500 pounds of beef a year. Dairying offers an equal opportunity.

Utilizing sericea lespedeza for hay, and clovers and grasses for pastures, 2½ acres can produce enough forage for a cow a year in this 50-inches-rainfall belt.

W. M. Nixon, Soil Conservation Service Region 4 agronomy chief, estimates 200,000 acres of crimson clover was grown in east Texas last year. Five years ago there wasn't 1 acre of this reseeding legume in Texas.

One of the most spectacular jobs of overcoming a bad soil condition took place in the fertile El Paso Valley on the Rio Grande River.

Hard clay soils made profitable irrigation cotton farming impossible. Land would not drain properly. Other areas were sand dunes which could not be handled.

Farmers completely changed the soil condition in their fields. Dump trucks hauled in load after load of sand from the dunes. The clay was broken with 12-foot-high plows. The sand was worked in, watered, and alfalfa planted. In three years this land, so rejuvenated, produced 2 bales of premium-priced long-stapled cotton per acre.

Fifty million acres of western Texas rangeland are infested with mesquite, a low-growing brushy shrub which becomes a larger tree if left alone. Until recently, control of mesquite has been a costly and futile proposition.

Work done at the Spur, Texas, Experiment Station has resulted in a control measure so effective that 40,000 acres were treated in Texas last year. This is the airplane application of 2,4,5-T in an emulsion of Diesel oil and water which effectively controls mesquite at a cost of $3.30 per acre.

Rufus King of Wichita Falls bought land for $10 an acre five years ago. By use of a drainage system and legumes, he now has land worth more than $50 per acre. Some of this land is available.

Montana: Louis True reporting:

There are opportunities in the Rocky Mountain area for ambitious farmers. There are problems to be overcome. Here's what the Rocky Mountain-slope farmer has to face: water erosion, wind erosion, and some lack of soil fertility.

Farmland can be bought for $10 per acre, but $100 has been asked and paid. Rangeland may be bought for $5 per acre, but it more likely will be $30. At least 1,000 acres are needed for dry farming and 2,000 acres for ranching.

The man who is now on the land has taken advantage of research work done by his college agricultural experiment stations and the experiences and developments of his neighbors. He once had range for his cattle that they couldn't

reach because there wasn't any water. He solved that by building floodwater reservoirs in strategic spots, and the grass started producing beef.

The dry-land farmer who raises spring wheat may get from 5 to 40 bushels per acre. Oats yields may range from 10 to 70; winter wheat, 10 to 40; barley, 10 to 60; flax, 5 to 25; corn, 2 to 50. Even if he pays $100 per acre for land, it won't take long to pay off—*if it rains enough.*

Top yields are very rare. So are the bottom yields. Research has shown that strip farming, combined with stubble mulch, keeps the soil from blowing and collects moisture during the winter.

The small airplane is becoming just as important on the Western farm as other farm machinery. The airplane kills weeds and insects in the growing grain. Some farmers are learning that spraying summer fallow by plane is weeks faster and substitutes for one or more tillage operations. Some plan to fertilize their land by plane.

In the irrigated areas, farmers have a greater fertility problem. Research has enabled them to use the right fertilizer, chiefly nitrogen and phosphate. Better crop rotation has given the land new life and put more bushels into the granary. Green-manure crops are used for the same purpose.

Some irrigation farmers have turned to irrigated pastures. The average of 50 farm pastures picked at random was $100 gross return per acre. Such pastures cost an average of $2.30 per animal unit per month of forage.

About 160 acres is considered a unit for irrigated farming. Irrigated lands sell for as low as $20 per acre, but $400 is not an uncommon price.

The farmer with capital can still get land in the West. But there is no more *free* land, in spite of daily requests for homestead suggestions. Because the Western farmer has problems peculiar to the area, the newcomer will have to spend long hours studying these problems and the wealth of research material now available.

Development of the Missouri Basin will make some new opportunities, but they will be limited. When Wyoming en-

[*Turn to page 98*

Sure, there are other ways to heat your home, but—

You can't beat COAL FOR COMFORT!

Coal does the world's best job of keeping your home more comfortably warm, whether you have central heating or room heaters. Here are the reasons:

Steadier heat—unlike the "all-on," "all-off" flame of other fuels, coal burns *steadily*—spreads warmth evenly throughout the house. This helps eliminate "cold pockets" and drafts—gives you a more comfortable, more healthful heat than you can get any other way.

Greater economy—in most localities it costs less to heat a house with coal—up to ⅓ less—than with oil. For coal users that's money in the bank!

Dependability—only with coal can you safely store a full winter's fuel supply. You don't have to worry about a sudden storm stopping fuel deliveries.

3 WAYS TO GET EVEN MORE FROM COAL:

An automatic heat regulator you can install yourself . . . modernize your hand-fired furnace for less than $25! This regulator automatically adjusts drafts . . . saves fuel and many trips to the basement.

New stokers do away with coal handling . . . automatically feed coal from bin to fire . . . give you all coal's comfort, plus greater economy and convenience.

Modern coal heaters require almost no attention . . . you light the fire but once a year—get a full day and night's heating from a single filling of coal. There are fewer ashes because they burn coal so efficiently.

FOR COMFORT AND ECONOMY

YOU CAN COUNT ON COAL!

BITUMINOUS COAL INSTITUTE, A Department of National Coal Association, Washington, D. C.

TWO GREAT NEW EXCLUSIVE FEATURES

GIVE THIS LOW PRICED H&R

HIGH PRICED... ...SHOTGUN ACCURACY!

Sheriff Thomas Geary, Leading Franklin County (Mass.) Sportsman, Says:
"I've used every kind of shotgun, but this H&R is the first bolt action I've ever been able to hit targets consistently with! That Sighting Dome makes the Gamester sight like my expensive guns; the Vari-Choke gives a really fine pattern."

H&R
Gamester DELUXE
MODEL 349

12 or 16 gauge — 3-Shot Tubular Action Repeating Shotgun $33.95

Now every discriminating shooter can have bolt action shotgun economy with superb shooting performance!

Smartly appointed with Monte Carlo stock; fluted comb; forestock finger grooves; rubber recoil pad. Perfect balance, fast, easy handling. See it at your dealer's!

NEW! EXCLUSIVE!
H&R "VARI-CHOKE"

9 different degrees of chokes, cylinder bore to full, with a simple twist! Spring tension keeps choke set. Settings visible for easy reading. Positive stops at both extremes prevent over-choking.

NEW! EXCLUSIVE!
MULNO SIGHTING DOME

Here is a really great advance in sighting accuracy for bolt action shotguns. The Mulno Sighting Dome raises your sighting line above confusion with absolute accuracy guaranteed. Demountable.

Harrington AND Richardson

FREE Catalog on all H&R rifles, shotguns, revolvers. Send your name and address.

172 Park Avenue · Worcester 2, Mass.

Canadian Subsidiary: H&R ARMS CO., Ltd., Drummondville, Quebec

QUALITY ARMS FAMOUS THE WORLD OVER

Land rush

From page 97

larged its irrigation system near Riverton, 11,000 veterans applied for farms. There were only 54 available.

Idaho; Rafe Gibbs reporting:

Irrigation water, commercial fertilizers, improved drainage and conservation—they're redoing the Pacific Northwest. Sometimes in years; once in a day.

On May 29, 1952, 80 acres of raw sagebrush land, pegged at less than $10 an acre, jumped in value about $15 an acre every hour for 22 hours. This fabulous 80 is part of the 120-acre Donald Dunn farm developed in a day in the Columbia Basin of Washington to celebrate the first coming of water from Grand Coulee Dam to 1,029,000 potential acres. Complete with buildings, the farm was a gift to Veteran Dunn.

Irrigation water will flow to 87,000 acres in the basin this year, to 30,000 to 100,000 acres annually thereafter. Land seekers have been intrigued by the thousands. Opportunities for leasing privately owned land—and most of it is so owned—are now good; for buying, poor. The land must be sold at appraised dry-land value, or water rights may be canceled, and owners are hanging tight.

Costs of land leveling, water-distribution system, farm machinery, livestock, and buildings on such a unit generally range from $7,000 to $25,000. Any home included in these figures is just livable. Costs are cash, however, and family work cuts them down. Snags send them up. One new settler has sunk $3,000 in a well, hasn't got water yet.

Returns? Several settlers on 80-acre units in the southern part of the basin, provided with water by pumping from the Columbia River, netted an average of $7,500 each the first year. O. C. Hedgepeth netted $11,000 from 20 acres of Ladino-clover seed his first year on the Bureau of Reclamation's Deschutes Project in Oregon. On the other hand, one new settler is working nights in a city garage to keep going.

Homesteads—not many—are being opened on some projects. Only a veteran has a chance. For 75 homesteads there were 30,000 applicants.

You don't start homesteading today with a slab of bacon and a sack of beans. The government insists you have $3,000.

"But I should have had $5,000," said William McClymonds, homesteader on the new Minidoka Project in Idaho. "Cleared 50 acres and planted it to wheat my first year. The jack rabbits took 30 percent. I'm a lucky guy, though. Got land of my own."

Drainage of "white" tide- and alkali land in Oregon has helped reclaim 350,000 acres. In Franklin County of Idaho, a recent survey revealed that 20,000 of the 55,000 irrigated acres needed drainage. The remedy is now being applied on many farms at $10 to $50 an acre. In one year, Arthur Povey of

Preston boosted his barley yield from nothing to 90 bushels an acre. Crop dusting by air and by land has also greatly increased production.

California; Howard Dail reporting:

California, with only 35 percent of its land area in farms and 11 percent in cropland, has sought in various ways to use more of its area for agriculture and to secure greater production per acre.

The biggest geographical area offering possibilities for greater production has been 25 million acres in woodland-grassland and brushland, nearly all of it lying in the mountain foothills. This land rates as thin to medium in fertility with most of it just plain thin. From 20 to 30 acres often is required to support a single mature beef animal, if the land is left to nature.

Ranchers have found that the first step in making much of this land more productive is to destroy the brush which gradually crowds out forage. In this battle, ranchers call on bulldozers, cutting equipment, fire, chemicals, and goats. They must keep an eye on the costs of the fight, because often the soil lies as only a thin layer, and the climate—some six months without rain—limits possible yields.

While controlled burning as a means of clearing such areas rates the headlines, it actually has played a minor part to date. This method rates as relatively cheap. A control burning of 9,700 acres in Shasta County two years ago cost but 60 cents per acre with reseeding charges amounting to $2.55 per acre.

In the Imperial, Coachella, and Palo Verde valleys—in the southeastern part of California—those tough-skinned farmers able to stand the heat have changed thousands of acres of desert into some of the most productive fields anywhere. Colorado River water rates as the big factor in this success story. Millions of acres of desert remain, but nearly all has the necessary fertility—and with the possibility of irrigation water can be put into production.

So-called alkali soils in various parts of the state have presented a limited opportunity to patient men interested in reclaiming soil. Such soils have sufficient accumulation of certain salts to make their use unprofitable in their present condition. In many cases, they have been brought back into production by leaching—applying a sufficient volume of water and providing enough drainage for that water to move these salts deep into the ground or away. The growing of crops ordinarily begins again on a limited scale and then moves into heavier production as the salts are leached away. END

Whenever you write us about your *Successful Farming* subscription, enclose an address label clipped from a recent copy. This will help us send you a prompt reply. Address subscription inquiries to Service Division, *Successful Farming*, Des Moines 3, Iowa.

With ANTIBIOTIC and B_{12}

SPARX now available in dry and condensed form, makes it safe and practical to take pigs from the sow at *any age!*

Start your pigs on Dry Sparx, especially made for very young pigs, any time that sow's milk is lacking from the 2nd day up to the 4th week. Use Condensed Sparx from the 4th week to supplement sow's milk before weaning, replace it after weaning to avoid weaning setbacks.

PRACTICAL AND PROFITABLE TO FEED AT ANY AGE!... NO SPECIAL EQUIPMENT NEEDED!

2 DAYS... This litter was removed from the sow on the 2nd day. When they had their picture taken on the 10th day, they weighed 8 lbs. By usual weaning time (8 weeks), they had grown to a strapping 47½ lbs.! Proof positive that you can raise a litter of pigs without the sow, save orphan pigs and runts from over-size litters!

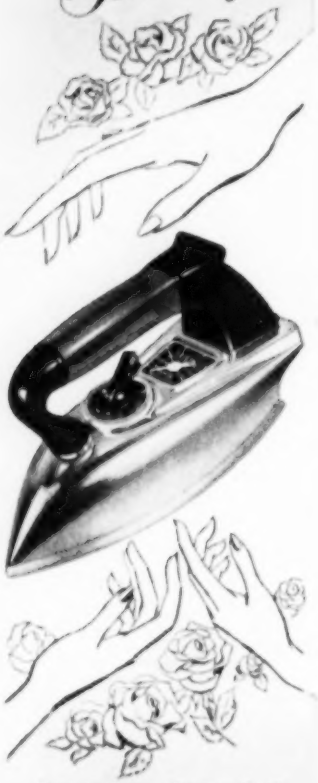
10 DAYS... Don't want to waste your sow's milk? Then keep your normal litters with the sow to the second or third week and then start Dry Sparx. Sows hold weight, gilts continue growing and can be bred third week after farrowing. This litter put on Dry Sparx at 10 days, weighed in at 387 lbs. at 8 weeks.

4 WEEKS... This is the age to switch pigs to condensed Sparx (whether raised on sow's milk or Dry Sparx). Recommended especially for big litters, late pigs, or for early weaning to re-breed on 2-litter schedule. This 4-week litter more than doubled their weight in the next 4 weeks without a weaning setback!

CONSOLIDATED PRODUCTS COMPANY
DANVILLE, ILLINOIS
Division Offices: Princeton, N. J., Des Moines, Ia., Sacramento, Calif. Makers of Semi-Solid Buttermilk, Semi-Solid Emulsions and Kaff-A. © 1952

TRULY AN

American Beauty



Best to Give— Best to Get!

— American Beauty provides Adjustable-Automatic ironing

. . . *plus*

- **Perfect Balance**
- **Choice of Weights**
- **Cool, Comfortable Handle**
- **Super-flexible Cord**
- **Satin-finish soleplate for the easiest glide in ironing**

Pride of Brides for Three Generations

American Beauty

ELECTRIC IRON

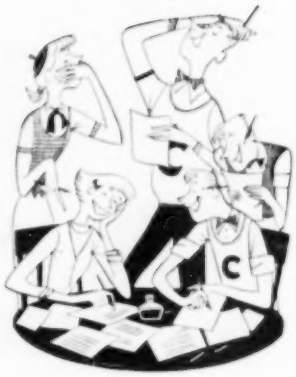
Since 1894

American Electrical Heater Co.

Detroit 2, Michigan

Attention, teens

Write us a letter and win a cash prize



If you are between the ages of 14 and 20, and unmarried, here's your chance to win a cash prize just by writing us a letter. To the boy or girl who sends us the most informative and thoughtful answers to the questions below will go a first prize of $50. The author of the next best letter will win $25. Then there are five third-place prizes of $10 each, and five fourth-place prizes of $5 each.

Letters will be judged impartially by our editors. All names will be kept confidential and *will not be printed* in any form.

Here are the questions:

1 Which of these subjects would you like the most help on? List your first, second, and third choices—and tell why.

- How to be popular.
- How to get along better with your family.
- How to develop confidence.
- How to conquer the blues and banish hurt feelings.
- How to have a better complexion.
- How to lose or gain weight.
- How to straighten out your values on what's right and wrong morally.
- How to feel good and have more energy.

2 Do most of your friends attend church and young people's meetings regularly? If not, what do you think is the reason?

3 In your opinion, what are the reasons a boy or girl "goes wrong"? How serious a problem is this with boys and girls in your community?

Very serious . . . . . .
Moderately serious . . . . . .
Of little importance . . . . . .

4 Are there enough opportunities for young people to have fun in your community? How could your social life be improved?

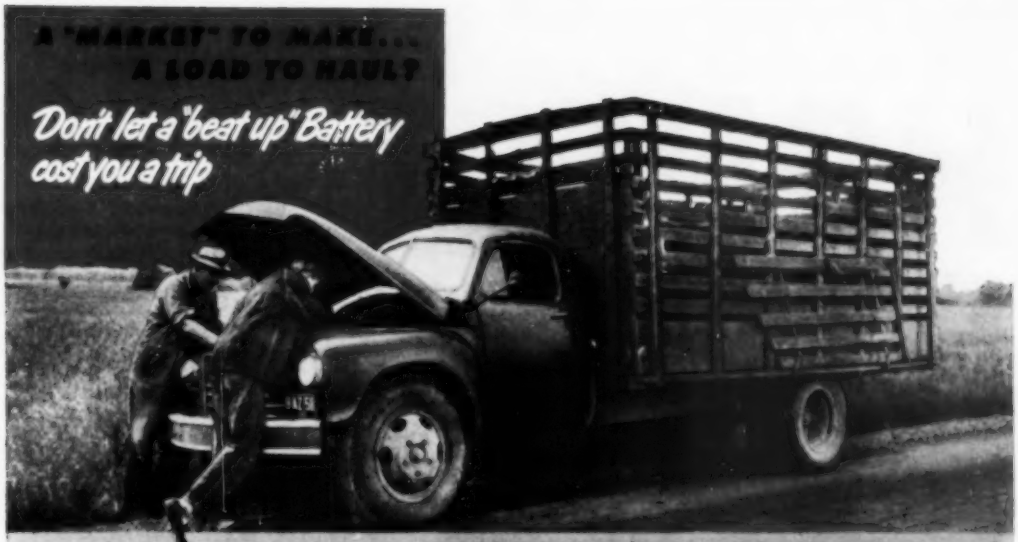
5 What are your plans or hopes for the future? (Boys going into military service answer in terms of when they will be discharged.)

Basic data:

Name . . . . . .
Address . . . . . .
Age . . . . . .
If in school, in what grade are you? . . . . . .
Size of farm . . . . . .
Does your father: own . . . . . rent . . . . . .
Type of farming . . . . . .

SUCCESSFUL FARMING

"Anything else you want me to fix, dear?"



AAA reports over 10 million breakdowns caused by battery trouble in one year

DON'T LET IT HAPPEN TO YOU...

GET THE NEW WILLARD

5-minute Battery Condition Test

✔ It's Free! ✔ It's Fast! ✔ It's Accurate!

For your car or truck...look at the Willard HEAVY DUTY *De Luxe*

With up to 56% more starting power at zero than required to meet standards of Society of Automotive Engineers! Sells at popular prices!

FOR THE ULTIMATE IN BATTERY PERFORMANCE

The Willard Super Master offers you 80 to 119% more starting power than required to meet standards of Society of Automotive Engineers. Metalex Grids provide 100% more protection against overcharging, today's No. 1 Battery Killer.

AND A GENUINE WILLARD BATTERY AT A LOW PRICE

Now you can have Willard quality at lowest possible price. Safety-Fill construction provides extra protection against acid spray and corrosion caused by over-filling. Fits most popular cars. Fully guaranteed!

WILLARD PRICES START AT $16.65

less liberal allowance for your old battery

Whenever you want to cash in on a "market" bulge—or keep a hauling date in any weather—be sure your truck battery has the wallop for cold engine starting!

Now, using the new Willard Charge and Condition Tester, your Willard Dealer can quickly show you the exact condition of each cell of your battery. Summer heat saps the strength of batteries. Maybe all your battery needs—right now—is a drink of pure water. If it lacks pep and power, a recharge might snap it right back to par—and save you the grief and expense of crippling battery failure. See your Willard Dealer tomorrow—then see him every month—for this Free . . . Fast . . . Accurate battery condition test which can save you a lot of trouble and money.

FOR THE NAME OF YOUR NEAREST WILLARD DEALER

CALL WESTERN UNION BY NUMBER, ASK FOR *OPERATOR 25*

Ring your local telephone office and just call Western Union by number and ask for Operator 25. She will give you the name and address of the Willard Dealer located nearest you. Or, look under "Batteries" in the Yellow Pages of your telephone directory.

Willard

"SAFETY-FILL" BATTERIES

WILLARD STORAGE BATTERY COMPANY

Factories in: Cleveland • Los Angeles • Dallas • Memphis • Portland • Allentown • Toronto

50 YEARS AND 100 MILLION BATTERIES HAVE PROVED WILLARD THE WORLD'S MOST DEPENDABLE BATTERY

NO DREAMED-UP CONCOCTION TAKES THE PLACE OF NATURE'S

HONEST FOOD

AND HERE IT IS:

NABISCO SHREDDED WHEAT

with MILK... America's great body-building breakfast! 100% whole wheat... bran and wheat germ included. Delicious... hearty... nutritious! The original Niagara Falls product.

NATIONAL BISCUIT COMPANY

Don't just say "Shredded Wheat"... say "NABISCO SHREDDED WHEAT"

Easier cooking—with an electric roaster

From page 41

Here are recipes for a complete meal that can be cooked in the roaster.

Scalloped Potatoes

Serves 6

Place in greased roaster-oven pan:
2 cups thinly sliced potatoes
Sprinkle over potatoes:
2 tablespoons minced onion
1 tablespoon minced parsley
Melt **2 tablespoons butter**
Add to melted butter:
2 tablespoons flour
2 teaspoons salt
few grains pepper
Blend.
Add **1 cup milk**
Cook, stirring constantly, until thick.
Pour half of mixture over ingredients in roaster-oven pan.
Spread over sauce in pan:
2 cups thinly sliced potatoes
2 tablespoons minced onion
1 tablespoon minced parsley
Top with remaining white sauce.
Cover and bake at 350° for about 1 hour.

Apricot Betty

Serves 6

Combine **3 cups graham-cracker crumbs**
6 tablespoons butter, melted
Cover bottom of small roaster-oven pan with ⅓ of crumb mixture.
Prepare **3 cups stewed, drained apricots**
Sift together:
¼ cup sugar
2 teaspoons cinnamon
½ teaspoon nutmeg
½ teaspoon cloves
1 teaspoon salt
Add **2 teaspoons grated lemon peel**
Place ½ the apricots on top of crumbs in roaster-oven pan.
Cover with ½ the sugar mixture.
Sprinkle with:
¾ cup apricot juice
Spread ½ of the remaining graham-cracker-crumb mixture over ingredients in pan.
Add **½ cup seedless raisins**
Place remaining apricots in pan.
Sprinkle with rest of sugar mixture.
Add **¾ cup apricot juice**
½ cup raisins
Top with remaining crumbs.
Cover and bake at 350° about 1 hour and 15 minutes.
Remove cover; brown about 15 minutes.

Baked Picnic Ham

Serves 6

Place on rack in electric roaster in largest baking dish:
1 6-pound picnic ham*
Bake at 350° for 3½ hours, or to 170° on a meat thermometer.

*If ham is salty, cover it with water and soak overnight. Then drain and place in electric roaster. **END**

Which states?

In your motor travel or your plans for travel, have you noticed these states?

1. Which 3 of these 6 states have the largest area: New York, Texas, Oregon, Pennsylvania, Montana, California?

2. Which 3 of these 7 states have the largest population: Texas, New York, California, Illinois, Montana, Pennsylvania, Ohio?

3. Which of these 5 states extends farthest north: Maine, Wisconsin, Michigan, Minnesota, New York?

4. Which of these 3 Pacific Coast states extends the farthest east: Oregon, California, Washington?

5. Which 8 of these 15 states border the Great Lakes: Kentucky, New York, West Virginia, Pennsylvania, Minnesota, Iowa, Indiana, Missouri, Michigan, Tennessee, Illinois, Nebraska, Wisconsin, Ohio, Vermont?

6. Which 5 of the 10 following states border the Gulf of Mexico: California, Texas, Georgia, South Carolina, Florida, Louisiana, Arkansas, Alabama, Oklahoma, Mississippi?

7. Which of these 5 states extends farthest south: South Dakota, Arizona, South Carolina, Tennessee, Arkansas?

8. In which of these 3 states is Great Salt Lake: Idaho, Arizona, Utah?

In which of these 3 states is Pike's Peak: Montana, Colorado, Wyoming?

9. Which of these states is bordered by only 1 state: Florida, Rhode Island, Maine, Washington, Maryland?

10. Which 3 of these 7 states are bordered by only 2 states: Maine, South Carolina, Louisiana, New Mexico, Oregon, Washington, Rhode Island?

Answers: 1. Texas, Montana, and California; 2. New York, California, Pennsylvania; 3. Minnesota; 4. California; 5. New York, Pennsylvania, Minnesota, Indiana, Michigan, Illinois, Wisconsin, and Ohio; 6. Texas, Florida, Louisiana, Alabama, and Mississippi; 7. Arizona; 8. Utah, Colorado; 9. Maine; 10. South Carolina, Washington, Rhode Island.

Send us your tips

If you have a quick, easy, or new way of preparing food, send us your tip. *Successful Farming* pays $5 for each tip published in the column, "Tips for the Cook." Please write on only one side of the paper. We cannot return unused tips.—Editors.

COMPARE and you'll CHOOSE

HAMILTON BEACH!

$37.50*

Compare it for VALUE!

Ask any owner of the Hamilton Beach Food Mixer. Forty years of experience and 15 million appliances say Hamilton Beach is *real value*. At $37.50, Hamilton Beach is your best dollars-and-cents buy. Compare! Meat grinder, slicer-shredder, coffee grinder, pea-huller and bean-slicer attachments available.

Compare it for EASE OF USE!

EASIEST Portability!

With beater unit that glides off stand for use at table, range, *anywhere!* No triggers, catches, latches. Compare!

EASIEST Operation!

With exclusive MIXGUIDE that puts 10 tested speeds under your thumb, magnified for flash reading. Hand that holds mixer sets speed. Frees your other hand to hold a pan, add ingredients. Full power at all speeds. Compare!

EASIEST Bowl Control!

Shifts ever-turning bowl while beaters revolve—guarantees thorough mixing. Easiest of all food mixers to use regardless of price. COMPARE and you'll choose Hamilton Beach! *Hamilton Beach Co., Div. of Scovill Mfg. Co., Racine, Wis.*

*Prices subject to change without notice.

NEW HAMILTON BEACH Mixette*

BEAT, MIX, MASH, WHIP, FOLD in any bowl or pan.

FULL-POWER MOTOR—even mixes heavy molasses-cookie batter.

$19.75* IN GIFT BOX

Includes bracket and screws for wall mounting.

THUMB ADJUSTS SPEED—other hand holds pan or adds ingredients.

HANGS ON WALL or fits in drawer—bracket furnished.

BEATERS SNAP in for use—snap out for cleaning.

Made by the makers of top-value Hamilton Beach Vacuum Cleaners.

STEVENS single barrel shotguns . . . get the pests

For generations, Stevens single barrel shotguns have been the first choice on the farm for pest control, hunting—all-round shooting utility.

Why? . . . because farm families *know*—and *appreciate*—STEVENS' dependability, durability, safety, and low-priced value.

Today, Stevens "singles" are still the best farm-gun buy. Strong, simple design for a lifetime of trouble-free shooting—sure, visible loading and unloading—safe, easy handling by all the family. *Write for free catalog of the complete line of Savage, Stevens and Fox shotguns and rifles.*

SAVAGE ARMS CORPORATION
Firearms Division Chicopee Falls, Mass.

Two Popular Models

STEVENS MODEL 94 (*shown*)

STEVENS MODEL 107

.410—20—16 and 12 gauge

Two-way, top opening lever for *either* right or left-hand shooters . . . quick opening action permits instant loading and ejection. Rigid, positive lock-up—can't shoot loose . . . unbreakable coil springs . . . safe, strong, dependable action . . . extra wide automatic ejector . . . tapered barrel. The design, fine gun features and value of Stevens single barrel shotguns have been *proven* in the hands of hundreds of thousands of shooters.

First in the Field

SAVAGE

SAVAGE · STEVENS · FOX · Rifles and Shotguns

SAVAGE · WORCESTER · Fund and Fund Joint Mfgrs.

Laughing

Opportunist

The voting inspector approached the man in line. "You voted this *morning*," he said. "I'll have to charge you with illegal voting."

"Charge me?" was the puzzled reply. "Heck, I expect to be *paid*."

Simple Directions

A man stopped at a service station out in the country one evening to ask directions to a nearby city. The owner of the station reluctantly left his radio.

"Well," he said in answer to the driver's question, "I don't know the exact mileage, but put your speedometer on 50. Just after the news broadcast you'll reach a crossroad. Turn left and keep going until you're almost through the Bob Hope program and then watch for a road to the right. Follow that to the second

• • • • • • • • • • • • • • • • • •

The Error of Our Ways

(*Calls From the News Columns*)

Remote-control Plumbing?

For rent: Eight-room house, modern, with bath in the country.—*Waukesha (Wisconsin) Daily Freeman.*

How's That Again?

Purebred springer spaniel pups for sale. Will do washing and ironing.—*The Waupun (Wisconsin) Leader-News.*

SUCCESSFUL FARMING

"Here's my two dollars . . . when do you think you can deliver the horse?"

at Life

commercial on the Fibber McGee program and there you are!"

In Fine Form

It was a long, tiring speech, but finally, the candidate hit the home stretch. "I want land reform, I want housing reform, I want . . ." Just then a bored voice in the audience interrupted: "*Chloroform!*"

Vermont Hospitality

A woman arrived at a little station in Vermont on a cold, stormy night and hired an elderly man to drive her to her friend's farm. The roads were muddy and full of ruts, the ride uncomfortable.

When she arrived, she asked the driver, "How much do I owe you?"

"Well, ma'am," replied the old man, "my regular price is a dollar, but seeing as it's such a bad night and the going is so terrible, I'll call it 75 cents."

• • • • • • • • • • • • • • • • •

Hogging the Spotlight

Some of the acts to appear are a German band, the Girl Scouts dramatic skit, vocal and instrumental numbers, and several bacon-twirling teams.—*North Dakota paper.*

A Real Buy

For sale—Seven-room dwelling, barn, 2 acres, $5,000. Also have 26 Rhode Island Red hens, laying $1.25 each.—*Kansas newspaper.*

SUCCESSFUL FARMING

"Oh, hullo—I was just about to try another tiny sample of your delicious cake . . ."

Just one more reason why RUSCO is America's favorite Combination Window

RUSCO Lumite* Screens have amazing strength . . . won't bulge, rust or stain . . . are made for year 'round service

Compared with Rusco, other combination windows are as old-fashioned as the horse and buggy. Why get combination windows that require you to remove all the screens in winter to protect them—or where you need a bulky, complicated, extra slide to push them up out of the way? *With Rusco you never have to change anything—you just arrange according to the weather!*

Rusco Lumite Screens are specially-made for year 'round use. Can't rust, rot or stain. They protect *every day of the year* against falls by children . . . save you work and trouble . . . keep your home cleaner by filtering out dust, dirt and soot that are heaviest in winter. And Rusco Lumite never needs painting!

RUSCO LUMITE SCREENS MEAN—

YOUR CHILDREN ARE SAFER. Tests show that a 300 lb. man can stand on a Rusco Lumite screen without breaking it. It's strong!

YOUR HOME STAYS CLEANER. Rusco Lumite screen has a "magnetic" property that traps dirt. To clean, simply wipe with a damp cloth.

NOTHING TO CHANGE, NOTHING TO STORE. Because Rusco Lumite is virtually wearproof and never needs painting, these screens don't have to be removed—ever.

*Trade Mark, Chicopee Mills, Inc.

THE STURDY, BEAUTIFUL RUSCO SELF-STORING COMBINATION SCREEN AND STORM DOOR

Made of tubular galvanized steel
It's the *strongest* door on the market!
Nothing to change—nothing to store.
Available in choice of 10 beautiful colors.

New 1953 **RUSCO** SELF-STORING GALVANIZED STEEL

COMBINATION WINDOWS and DOORS

Before you buy—investigate! You always get more for your money with Rusco

CALL YOUR LOCAL RUSCO DEALER FOR FREE DEMONSTRATION OR WRITE

THE F. C. RUSSELL COMPANY

DEPT. SF 102 CLEVELAND 1, OHIO

IN CANADA: TORONTO 13, ONTARIO

Now! New Improved VEL* CLEANS MILKING EQUIPMENT

Cleaner...Faster...Easier!

HIGH QUALITY MILK DEMANDS CLEAN EQUIPMENT

Really clean milking equipment lessens the danger of refusal at the milk-processing plant – gives you higher profits. New, improved Vel does an excellent cleaning job, no matter how hard the water. New Vel is not a soap. Vel is a soapless suds recommended by many leading agricultural schools and milking equipment manufacturers.

*VEL is the trade-mark of the Colgate-Palmolive-Peet Co.

BUY 2 PACKAGES OF VEL—1 FOR THE KITCHEN, 1 FOR THE MILKHOUSE

Easier cooking—with a pressure pan

From page 15

A pressure saucepan can be a real life-saver if company drops in unexpectedly. Put the main part of your meal on to cook in a pressure saucepan. Make the coffee. Set the table. By this time, the tender-cooked food will be practically ready to dish up! Or if your family is made up of late-comers to meals, you can keep foods hot and appetizing for them in the pressure saucepan. Reduce the pressure, and leave the cover on the pan till the time comes to serve.

How to use your pressure cooker

1. Always operate your saucepan as the manufacturer directs. Add the *exact* amount of water specified. Release all the air from vent or petcock, according to directions, before timing the cooker. Don't remove lid until the pressure is down.

2. Never fill a saucepan more than ⅔ full when cooking a solid mass such as soup or cereal.

3. Time foods carefully. Don't overcook. Accuracy is very important because of the short cooking time required. Extra minutes will mean mushy foods—and loss of vitamins and minerals.

4. If a recipe calls for instant reduction of pressure, set the cooker under a stream of cold water or in a pan of cold water. To reduce pressure normally, remove cooker from heat and allow pressure to drop gradually.

Here are some pressure-saucepan recipes you'll like:

Veal-bird Dinner

Serves 4

Season ... **2 veal steaks** cut ½ inch thick
Cut each steak in half (make 4 pieces).
Place a large spoonful of **Stuffing** on each piece of meat.
Make "bird" by folding two opposite edges of meat up over the dressing, overlapping them.
Tie with string to keep meat folded.
Heat ... **¼ cup fat** in pressure pan
Flour veal birds.
Brown on both sides slowly for 15 minutes.
Slide trivet under birds.
Add ... **4 potatoes**
6 carrots
Sprinkle with:
1 teaspoon salt
Add ... **½ cup water**
Cook at 15 pounds pressure for 18 minutes.
Let pressure return to normal.
Stuffing:
Tear ... **2 slices dry bread** into small pieces
Cook ... **¼ cup chopped onion**
¼ cup chopped celery in
1 tablespoon butter
Add to crumbs.
Add ... **½ chicken-bouillon cube** dissolved in
2 tablespoons hot water
Mix lightly.

Pork-chop Dinner

Serves 4

Dredge . . . **4 pork chops,** $1\frac{3}{4}$ inches thick, in mixture of:
$\frac{1}{2}$ cup enriched flour
1 teaspoon salt
1 tablespoon paprika
Preheat pressure saucepan.
Brown chops on both sides in:
1 tablespoon fat
Add . . . . **$\frac{1}{2}$ cup water**
Adjust cover; exhaust air from cooker.
Cook at 15 pounds pressure for 10 minutes.
Reduce pressure rapidly.
Open cooker.
Place . . . **2 medium sweet potatoes,** peeled and cut in half, on chops
Prick skins of:
4 medium apples, cored
Place in cooker.
Adjust cover; exhaust air.
Cook at 15 pounds pressure for 5 minutes.
Reduce pressure rapidly.

Beef Stew 'n' Dumplings

Serves 6

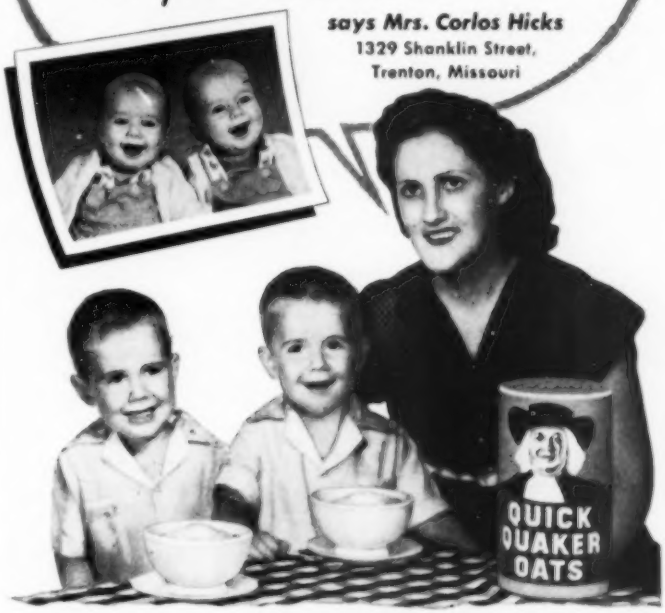
Cut . . . . . **$2\frac{1}{2}$ pounds beef shoulder** into 2-inch squares
Roll in . . . **$\frac{1}{3}$ cup flour** mixed with
1 teaspoon salt
$\frac{1}{8}$ teaspoon pepper
Saute in . . **3 tablespoons fat** in bottom of pressure cooker until well browned
Add . . . . **3 cups boiling water**
Adjust cover; exhaust air from cooker.
Cook at 15 pounds pressure for 20 minutes.
Release steam gradually.
Remove lid from cooker.
Add . . . . **3 cups diced potatoes**
2 cups diced carrots
1 cup sliced onion
1 teaspoon salt
1 clove garlic
$\frac{1}{2}$ teaspoon marjoram
$\frac{1}{2}$ teaspoon thyme
Adjust cover; exhaust air from cooker.
Cook at 15 pounds pressure for 10 minutes.
Release steam gradually.
Make your favorite dumpling recipe.
Drop dumplings from spoon onto stew.
Cover and simmer for 10 minutes.

[*Turn to page 108*

SUCCESSFUL FARMING

"I started my twins on **Quaker Oats at 4 months,** and they're strong healthy 3-year olds now!"

says Mrs. Corlos Hicks
1329 Shanklin Street,
Trenton, Missouri



Yes, in body-building protein Quaker Oats is First of 14 well-known cereals tested by a leading University!

"My 3-year old twins are healthy and full of life. And they've had good hot Quaker Oats for breakfast every single morning since they were 4 months old!" says attractive Mrs. Corlos Hicks, mother of Corlos Lee and Corol Lee.

"They've thrived on Quaker Oats. Never had any special baby foods.

"I think that any mother—no matter how large or small as may be her income—can feel sure her baby is getting the best when she gives him good nourishing Quaker Oats!"

Mothers! Doctors have always known that Quaker Oats' high protein value benefits baby as well as the rest of the family.

Now a leading State University has made tests and proved that Quaker Oats is better in growth-protein than any of 14 leading cereals—including two well-known "baby" cereals.

Results are published in FOOD RESEARCH, a national scientific journal.

It's easy to make Quaker Oats for baby and family at the same time

For baby's first oatmeal, just use a double boiler. Follow the easy directions on the Quaker Oats package.

Then you can make creamy-delicious hot oatmeal for baby and the whole family at the same time.

Note: Quaker Oats is your best buy in cereals. It still costs less than 1¢ a serving! Get a package today!

Quaker Oats

THE GIANT OF THE CEREALS!

Quaker and Mother's Oats are the same

Finds Active Dry Yeast a time-saver

Busy Mother wins Cooking Honors

Surrounded by her admiring young sons, Mrs. Mary Giovannetti shows off 3 big prize ribbons from the California State Fair. In last fall's cooking competition she took 2 first prizes and tied for a big sweepstakes award!

Mrs. Giovannetti of Woodland, Cal., is another of the many prize-winning cooks who praise Fleischmann's Active Dry Yeast. "It's so convenient," she says. "Stays fresh for months!"

Fleischmann's Active Dry Yeast needs no special care! And it's so easy to use—1 package equals 1 yeast cake in any recipe. When you bake at home, use yeast. And use the best—Fleischmann's Active Dry Yeast.

Easier cooking—with a pressure pan

From page 107

Pot Roast and Vegetables

Serves 4

Heat pressure pan.
Add . . . **1 tablespoon fat**
Brown . . **3-to-4-pound beef chuck roast** on all sides
Season with:
salt and **pepper**
Add . . . **½ cup water**
Adjust cover; exhaust air from cooker.
Cook at 15 pounds pressure 30 to 35 minutes.
Let pressure return to normal.
Open cooker.
Add . . . **6 small potatoes**
6 medium onions
6 medium carrots
Season.
Adjust cover; exhaust air from cooker.
Cook at 15 pounds pressure for 10 minutes.
Reduce pressure rapidly.

Spareribs With Barbecue Sauce

Serves 4

Heat . . . **2 tablespoons fat** in bottom of pressure pan
Brown . . **3 to 4 pounds spareribs** on both sides in hot fat
Season with:
1 teaspoon salt
⅛ teaspoon pepper
Combine **1 onion,** minced
1 10½- or 11-ounce can tomato soup
2 tablespoons barbecue sauce
½ cup water
Pour over ribs.
Adjust cover; exhaust air from cooker.
Cook at 15 pounds pressure for 15 minutes.
Reduce pressure gradually.
Serve at once. END

State-flower puzzle

Unscramble the letters to spell the state flower for each of the following states. Solution below.

1. Idaho say:ring - - - - - - -
2. Kansas sure:flown - - - - - - - - -
3. Nevada gush:saber - - - - - - - - -
4. Missouri hath:worn - - - - - - - -
5. Colorado uncle:bimo - - - - - - - - -
6. Kentucky lodger:don - - - - - - - - -
7. Oklahoma stole:time - - - - - - - - -
8. Wisconsin love:it - - - - - -
9. Louisiana gain:loam - - - - - - - -

Answers:

1. Syringa 2. Sunflower 3. Sagebrush 4. Hawthorn 5. Columbine 6. Goldenrod 7. Mistletoe 8. Violet 9. Magnolia

—*William Baumgartner*

LOWEST PRICED IN ITS FIELD

This beautiful new Styleline De Luxe 2 Door Sedan—like so many other Chevrolet body types—lists for less than any comparable model in its field! (Continuation of standard equipment and trim illustrated is dependent on availability of material.)

Built extra strong to take hard usage

One good look at the big, beautiful Chevrolet—so colorful with its new Royal-Tone Styling—and it's hard to realize that Chevrolet is the lowest-priced line in its field.

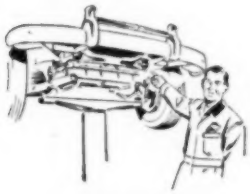
Here's a car that's soundly engineered and strongly built . . . designed to stand up under every kind of driving with little care, minimum upkeep.

Only Chevrolet offers you Centerpoise Power; engine vibrations and power impulses are screened out, isolated from driver and passengers. The engine rides on new high side mountings . . . centered, poised, cushioned in rubber.

New Quick-Reflex shock absorber action permits a softer, smoother Knee-Action ride.

And the Chevrolet Valve-in-Head engine—long famed for its economy—keeps gas and oil costs down.

Stop in at your Chevrolet dealer's. Chevrolet Division of General Motors, Detroit 2, Michigan.



Extra-Rugged Box-Girder Frame

Chevrolet's full-length, heavy-duty, box-girder frame with extra-sturdy cross-members, provides a broad, solid base of great rigidity, maximum strength and stability to serve as ideal body support.

Centerpoise Steering for Rough Roads

The Chevrolet steering system centers control *between* the front wheels, gives a smoother feel to the wheel . . . provides positive steering under all road conditions; makes Chevrolet easier to steer.

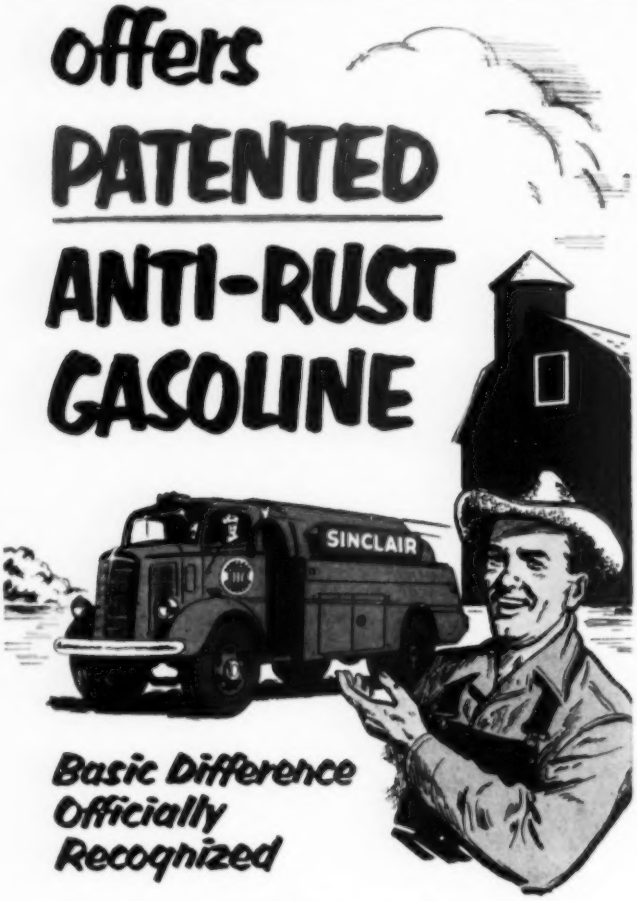
Steel Welded to Steel in Body by Fisher

Fisher Body sets the standard in the automobile industry—for styling, for craftsmanship! And Fisher Unisteel construction guards you with the solid strength of steel . . . above, beneath, and all around you.

MORE PEOPLE BUY CHEVROLETS THAN ANY OTHER CAR!

The Only Fine Cars **PRICED SO LOW!** **CHEVROLET**

ONLY SINCLAIR offers PATENTED ANTI-RUST GASOLINE



Basic Difference Officially Recognized

Granting of a U. S. Patent is official recognition that Sinclair Anti-Rust Gasoline is not "just another gas" but a new product that is basically *different* from any other gasoline.

Sinclair Anti-Rust Gasoline contains the amazing rust inhibitor RD-119®. Used regularly, it effectively *stops* damaging rust and corrosion in fuel systems – can save you costly repairs to cars, trucks and tractors.

Save time – trouble – money. Get the gasoline that gives all the power, all the high anti-knock and economy of today's modern gasoline PLUS Anti-Rust Protection at no extra cost. Get Sinclair Anti-Rust Gasoline with RD-119.

For top performance, ask your local Sinclair Representative for Sinclair Ethyl.

SINCLAIR ANTI-RUST GASOLINE

THE Farm

By Gus Larson

Do dark red Hereford steers gain faster than light red Herefords? Do double-yolked eggs ever hatch? Where are farmers organizing 200-bushels-per-acre corn clubs? If your curiosity is aroused, let's begin.

Score 5 points for each correct reply. If you score (a) 90 to 100 points—excellent. (b) 75 to 85 points—very good. (c) 50 to 70 points—passed. (d) 45 points or below—sorry.

1. Hereford Grower Fred Stark says: "Dark red Hereford steers gain better than light red steers." Sam Kell thinks: "Color doesn't affect gains." Who is right? (a) Fred (b) Sam.

2. To expel gas from a bloated cow, farmers sometimes tie a broomstick gag or a bag of salt in the cow's mouth. This is (a) good practice (b) poor practice.

3. Fifteen thousand, five hundred farm people are killed in accidents each year. How many farm people are permanently disabled (loss of arm or leg) each year? (a) 1,000 (b) 11,400 (c) 50,000.

4. Three meals a day is not necessarily the best eating schedule for everyone. Some people, often the elderly, feel better if they eat more often but less at a time. (a) true (b) false.

5. More than 3,000,000 cows were artificially bred in 1951. What state leads in the number of cows bred artificially? Would you say (a) Minnesota (b) Pennsylvania (c) Wisconsin?

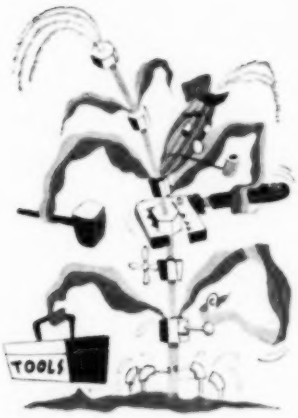
6. There is a new dog food which will even make a wet Airedale smell good. This food does the work because one of its ingredients is (a) creosote (b) perfume (c) chlorophyll.

7. Baby pumpkins which are brilliantly colored and about the size of a croquet ball when fully matured grow on a (a) bush (b) vine (c) tree.

8. The farmer is improving his living standard every year. How much did average level of living of United States farm-operator families increase from 1940 to 1950? (a) 12 percent (b) 31 percent (c) 54 percent.

9. Calves will eat from 35 to 40 pounds of corn silage a day plus their supplement. How many pounds of corn silage will yearlings eat per day? (a) 45 (b) 75 (c) 55.

Quizbox



10. An 8-foot cornstalk has 1½ miles of plumbing. These tiny pipes carry food down to the roots and soil nutrients to leaves. When pipes close, disease develops. Statements are (a) true (b) false.

11. Mrs. Nell Farr says: "When canning tomatoes, put in some aspirin to kill bacteria." Mrs. Betty Hull argues: "Aspirin doesn't kill all bacteria." Who is right? (a) Nell (b) Betty.

12. The walls and floors of empty grain bins should be sprayed with DDT, methoxychlor, pyrethrum, or allethrin. This is (a) good advice (b) poor advice.

13. There is something new for Bossy. It is a new weatherproof salt block. This block stays dry because it is protected by an (a) electrical unit (b) wood cover (c) resin plastic coat.

14. In some areas farmers are growing more than 200 bushels of corn per acre. And they are planning to organize 200-bushels clubs. Is this in (a) Illinois (b) Iowa (c) Tennessee?

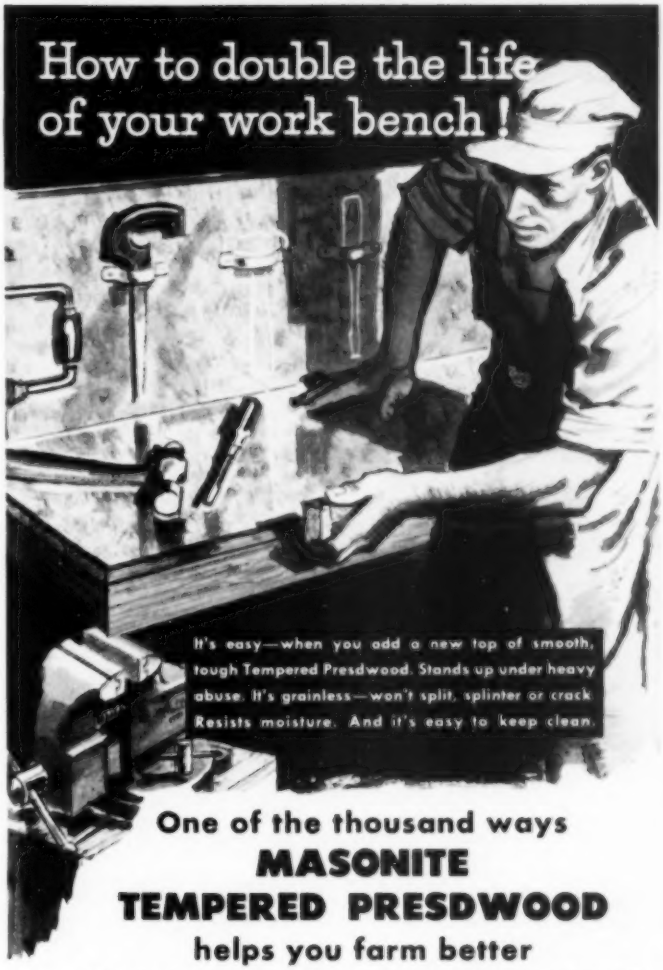
15. Cows milked three times a day will produce from 6 to 20 percent more milk than will cows milked twice daily. (a) false (b) true.

16. A gopher will burrow 300 yards of tunnels in one season. To kill them, (a) spray holes with chlordane (b) pour poisoned grain in holes and cover openings.

17. If a person gets short of breath after climbing a flight of stairs, it is a positive sign of heart disease. (a) true (b) false.

18. Mrs. Rose Henshaw said: "Double-yolked eggs often hatch twin chicks." Mr. Henshaw replied: "Double-yolked eggs hardly ever hatch." Who is right? (a) Mrs. Henshaw (b) Mr. Henshaw.

Answers on page 112



One of the thousand ways

MASONITE TEMPERED PRESDWOOD

helps you farm better

You can put it on yourself . . . a new, long-lasting top that will add years of good service to the life of your work bench. Here's the quick, economical way:

From a panel of Masonite 3/16" Tempered Presdwood®, cut out a section to the dimensions of your bench top. Apply smooth side up and fasten with drive screw nails. Bevel and sand edges. Drill openings for bench vise and other fixed tools.

There are many other helpful uses for this dense, rigid, all-wood hardboard around your repair shop. All you need are ordinary woodworking tools. Tempered Presdwood comes in convenient panels 4 feet wide and up to 12 feet long. Your building materials dealer can give you more information. Or send handy coupon for illustrated folder of free farm plans.

MASONITE® CORPORATION
Dept. SF-10, Box 777, Chicago 90, Ill.

"Masonite" signifies that Masonite Corporation is the source of the product

Please send me, without obligation:

☐ Free sample, and list of free plans available.
☐ Complete information about farm uses of Masonite Presdwood.

Name.....

Address.....

Post Office.....*State*.....

Better Hardboards for Better Farming

FRAM FILTERS

Guaranteed Best You Ever Bought or Your Money Back!

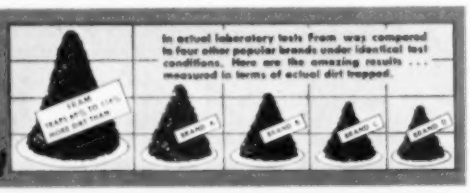
Your farm engines deserve the best oil filter protection you can buy . . . filters save you time, motors, money. But oil filter performance is only as good as the cartridge inside. And FRAM *Filters* BEST!

Two Good Reasons Why:
(1) The chart below proves that Fram Cartridges filter oil cleaner, clean it faster, keep it clean longer. (2) Fram Cartridges are custom-engineered for your engines . . . in both size and type to meet the requirements of your tractor, truck, car, or any other farm engines.

So remember, your oil filter cartridge is the working part of the filter . . . and FRAM *Filters* BEST. They're unconditionally guaranteed . . . best you ever bought or your money back.

Pick up a handy Farm-Pak carton of six genuine Fram Cartridges at your Fram Dealer's. With it you'll get a Fram Lubri-Graf to keep check on the condition of your engines. If your equipment isn't oil filter equipped, install a famous Fram Oil & Motor Cleaner for longer, economical, dependable life.

FRAM FILTERS BEST by actual test!



Guard Cooling Systems, Too!

New Fram Radiator & Water Cleaner provides complete cooling system protection for tractors, trucks, cars. Stops rust, scale and dirt. Harmless to antifreeze. Two sizes, $9.95 and $10.95 in ready-to-install kits.

FRAM
OIL • AIR • FUEL • WATER
FILTERS

FRAM CORPORATION, Providence 16, R. I. *Plants in:* Pawtucket, R. I.; Jacksonville, Fla.; Greenville, Ohio; Brigham City, Utah. *In Canada:* J. C. Adams Co., Ltd., Toronto, Ontario.

Answers to farm quizbox

Questions start on page 110

1. (b) is correct. U.S.D.A. research shows average gain by Hereford steers of different color shades is the same.

2. (a) is correct. Walter J. Hastings, Jr., states that action may start rumen contractions which will expel gas.

3. (b) is correct. John D. Rush reports in U.S.D.A. *Agricultural Situation* that 11,400 farm people are permanently disabled each year.

4. (a) is correct. U.S.D.A. states some people feel better when they eat more often than three times a day.

5. (c) is correct. U.S.D.A. Farm Letter reports that Wisconsin is the top state with 691,000 cows enrolled in breeding associations.

6. (c) is correct. Chlorophyll in the food is supposed to make dog odorless.

7. (a) is correct. Baby pumpkins grow on a bush.

8. (c) is correct. U.S.D.A.'s Margaret Jarman Hagood so reports.

9. (c) is correct. W. M. Beeson and T. W. Perry, Purdue University Experiment Station, state that calves and yearlings eat these amounts of corn silage daily.

10. (a) is correct. G. N. Hoffer, American Potash Institute, recommends use of potash to keep corn plumbing open.

11. (b) is correct. *Today's Health* reports aspirin does not guarantee a germ-free product.

12. (a) is correct. U.S.D.A. recommends, but cautions using DDT in proper dosages. Do not use chlordane.

13. (c) is correct. Developed by H. Futter, Dishman, Washington, salt block is protected by plastic coat.

14. (c) is correct. Some Tennessee farmers grew more than 200 bushels of corn per acre. They now plan 200-bushels clubs.

15. (b) is correct. Experiments indicate that milking high-producing cows three times daily rather than two increases milk yields.

16. (b) is correct. Placing poisoned grain in gopher holes is most effective way of killing pests.

17. (b) is correct. Washington Heart Association is our authority and reports shortness of breath may indicate some other trouble. See your doctor.

18. (b) is correct. The writer has heard of only one case where double-yolked eggs hatched. END

Speed is America's Number One highway killer. *Don't be a victim! Take the time you need to get there safely.*

How much do reckless drivers add to your auto insurance bill?

If you look into the cost of automobile insurance in your community, you may wonder how State Farm Mutual can offer top-quality insurance protection and service at such remarkably low cost.

Here's one big reason. State Farm aims to insure only careful drivers. This means that the reckless drivers in your area—whose frequent accidents raise the general cost of insurance—do not have to be considered in establishing State Farm rates.

And this, combined with many other money-saving practices, enables this great mutual company to offer sound insurance at big savings.

If your own careful driving entitles you to State Farm's low-cost, "careful driver" insurance, it will pay you to see your State Farm agent. Look up "State Farm" in your classified phone book.

Other benefits of State Farm membership

1. *Semi-annual premium payments.* Wouldn't it be easier on your budget to pay for your automobile insurance in two small payments each year, rather than in one lump sum? Advanced State Farm billing and bookkeeping practices make this possible for State Farm members—at no increase in cost.

2. *Mutual benefits.* State Farm is a mutual company. Savings from low claim costs and high operating efficiency are passed on to members, who actually own the company, in the form of low insurance rates. On the other hand, State Farm policies are nonassessable. You never pay more than the established rate for any period.

3. *Fast, fair claim settlement.* More than 6,500 State Farm agents and claim representatives stand ready, day or night, to come to your aid in case of accident. State Farm cuts red tape—pays an average of one claim every 12 seconds, every working day.

4. *Established leadership.* State Farm now writes more full-coverage automobile insurance than any other company, with more than 2,300,000 members in the auto company alone. And new applications for State Farm insurance are coming in on an average of 2,000 every working day!

Look to State Farm for Life and Fire Insurance, too. See your agent!

State Farm Insurance Companies

State Farm Mutual Automobile Insurance Company
State Farm Life Insurance Company
State Farm Fire and Casualty Company

Home office: Bloomington, Illinois • *Branch offices:* Berkeley, California • St. Paul, Minnesota Lincoln, Nebraska • Marshall, Michigan • Dallas, Texas • Charlottesville, Virginia • Toronto, Ontario • Field claim offices in more than 170 principal cities.

Hear "Cecil Brown News Commentaries," Saturdays and Sundays over Mutual Broadcasting System stations.

"Prize Racket" Royledge on shelves.

NEW COLOR "MIRACLE"

See how dazzling color glorifies your whole kitchen the instant sparkling "Plasti-Chrome" Royledge is on shelves. All-one-piece—just place lining paper on shelf and fold down color-bright Doubl-Edge. So inexpensive—only about a penny-a-foot. Choose from gorgeous new designs at 5 & 10's, Supermarkets, House-furnishing, Naborhood, Dept. Stores.

Royal Lace Paper Works, Inc., Bklyn. "Royledge" Tr. Mk. Reg. U. S. Pat. Off.

Plasti-Chrome
Royledge
for WOOD and METAL shelves

Shelf Lining Paper & Edging all-in-one
9 feet 10¢

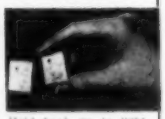
A-D-H-E-S-I-V-E Edging moisten and apply
18 ft. pkg. 19¢

Go Classified in Successful Farming. Mail-order sales increase with every advertisement. Write for details on how you can increase your sales.

RAINBOW RIBBON
For Beautiful Gift Wrapping!

Yards and yards of quality satin ribbon that has every pastel shade imaginable blended along its length! Blue. Takes into row, gold, green, lavender. Creates lovely effects, makes beautiful and unusual gift packages all year round. 30 yards of Rainbow Ribbon, 7/16" wide on a spool. Only **$1** postpaid.

THE LORD'S PRAYER
In A Miraculous Tiny Book



Written on parchment, no bigger than a pin head! Hold book up to light, look through tiny hole—there's the Prayer—amazingly easy to read. Book is in white plastic with gilt engraved. Size: ¼"x¼"x¼". Ideal for pocket or purse.

50c postpaid

SEE-THRU PRESS CLOTH
Makes Tricky Pressing Easy!

Takes all guesswork out of tricky pressing jobs. Now see exactly what you're doing while ironing darts, pleats, tucks! Made of specially treated organdy. Prevents scorch, shine, ends instantly. A big 12"x25". Only **59c** postpaid.

Send for big FREE Christmas Catalog.
Mail Orders Promptly Filled. Satisfaction Guaranteed.
Send Check or M. O. No C. O. D.'s Please.

SPENCER GIFTS, Dept. S10
Atlantic City, N. J.

Enjoy better farm living . . .

. . . by letting *Successful Farming* continue to help you solve all your farm problems.

CAMPBELL-HAUSFELD
Tankmobile

takes compressed air anywhere

The Tankmobile with the world famous Pressure Princess piston-type air compressor brings service station to farm . . . . to inflate your tires, lubricate farm machinery, spray-paint farm buildings . . . . the easy time-saving way. Automatic start and stop. Electric motor or gas engine models.

See it at your dealer or write

THE CAMPBELL-HAUSFELD CO.
205 RAILROAD AVE. HARRISON, OHIO

Chuck cuts

From page 30

Lemon-barbecued Pot Roast

Makes 6 servings

Combine 1 clove garlic, sliced
½ cup lemon juice
3 lemon slices, cut in quarters
2 tablespoons chopped onion
½ teaspoon salt
½ teaspoon celery salt
½ teaspoon pepper
¼ teaspoon thyme
Let stand 24 hours.
Brown in hot fat in heavy skillet
1 3-pound chuck roast
Add lemon sauce; cover tightly.
Simmer 3 to 3½ hours, or until meat is fork-tender.

Stew of Distinction

Makes 4 servings

Brown . . . 1½ pounds chuck, cut in 1½-inch cubes, in
3 tablespoons lard
Add . . . . . 1½ teaspoons salt
few grains pepper
3 cups water
Cover and simmer for 2 hours.
Add . . . . . 5 carrots
5 medium white onions
1 small bunch celery, cut in 4-inch pieces
Cover and simmer for 30 minutes, or until vegetables are tender.
Tomato Dumplings:
Sift together:
1½ cups sifted flour
1 teaspoon salt
3 teaspoons baking powder
Combine 1 egg, beaten
1 tablespoon melted fat
½ cup tomato juice
Pour into dry ingredients, stirring only until flour disappears.
Drop Tomato Dumplings on top of meat and vegetables.

Italian Steak

Makes 6 servings

Melt . . . . 2 tablespoons lard
Add to lard:
1 3-ounce can sliced mushrooms
½ cup sliced onion
2 tablespoons chopped green pepper
Cook 5 minutes.
Blend in ⅓ cup chili sauce
¼ cup water
1 teaspoon salt
⅛ teaspoon pepper
⅛ teaspoon garlic salt
½ teaspoon Worcestershire sauce
¼ cup sliced olives
Place in frying pan
1½-pound blade steak, ¾ inch thick
Pour sauce over steak.
Cover and bake at 300° (slow) for 1½ to 2 hours.

Beef Pin Wheels

Makes 8 slices

Mix together:
- **1 pound ground chuck**
- **1½ teaspoons salt**
- **⅛ teaspoon pepper**
- **1 egg**
- **2 tablespoons melted fat**
- **⅓ cup dry bread crumbs**
- **2 tablespoons tomato juice**

Press out on waxed paper to form rectangular sheet about ½ inch thick.

Spread over crosswise half of meat
- **1½ cups mashed potatoes,** seasoned

Spread other half with
- **1½ cups mashed carrots,** seasoned

Roll meat firmly, jelly-roll fashion, starting with the end covered with carrots.

Wrap in waxed paper and chill several hours.

Cut with sharp knife into eight 1-inch slices.

Place on preheated broiler, 3-4 inches below heat.

Brush with **melted butter**

Broil slowly about 5 minutes.

Turn; brush again with **melted butter**

Broil second side about 5 minutes.

Chinese Pepper Steak

Makes 4 servings

Melt . . . . . **2 tablespoons lard**

Brown . . . **1 pound beef chuck,** cut in thin strips

Add . . . . . **2 tablespoons chopped onion**
- **1 clove garlic,** minced
- **2 large green peppers,** cut in strips
- **½ cup chopped celery**
- **2 tablespoons chopped pimiento**

Make stock of:
- **1 bouillon cube**
- **½ cup boiling water**

Add stock to beef.

Cover and simmer for 30 minutes, or until meat is tender.

Blend . . . **1 tablespoon cornstarch**
- **2 tablespoons water**
- **1 teaspoon soy sauce**

Thicken beef liquid with cornstarch mixture.

Simmer for 5 minutes.

Serve hot with **rice.**

Fruited Spiced Pot Roast

Makes 6 servings

Brown in heavy kettle:
- **3 pounds chuck pot roast** in
- **2 tablespoons lard**

Add . . . . . **2 cups water**
- **3 tablespoons mixed pickling spices**

Cover tightly and simmer for 2 hours.

Add . . . . . **½ cup dried apricots**
- **½ cup dried prunes**
- **1 teaspoon sugar**

Cover tightly and continue cooking for 1 hour.

[*Turn to page 116*

Buy Fancy Solid Pack (Blue Label), or Convenient Chunk Style (Green Label)... same fine quality packed 2 different ways

You can't miss with Arthur Godfrey's delicious recipe for Star-Kist Tuna Special. It's economical... easy to prepare...and so mouth-waterin' *good* your family will beg you to serve it often!

"AMERICA'S BEST IN FLAVOR TESTS!" In unbiased taste tests, thousands of homemakers and food experts voted tender-textured Star-Kist Tuna the 3-to-1 flavor winner over *all other* nationally advertised brands of tuna!

Hear and See "ARTHUR GODFREY TIME"—Daily, Monday through Friday
CBS RADIO AND TELEVISION NETWORKS
See your local newspaper for time and station

Enjoy this
CLABBER GIRL
Budget Saver

Try this deliciously different way of making a little left-over beef go a long way . . . And, with Clabber Girl, it is as easy to put together and as sure-to-be good as ordinary pinwheels . . . Here is a money-saving recipe worth trying.

BEEF PIN WHEELS

BISCUIT: Sift together flour, baking powder and salt. Cut in shortening until mixture resembles coarse corn meal. Add milk; stir to make a soft dough that can be handled and formed into a ball. Transfer ball of dough onto a lightly floured board; knead until smooth. Roll out into a 9x12-inch rectangle. Sprinkle with pimiento. Spread with beef filling. Starting with the narrow end, roll like a jelly roll. Cut into 6 1½-inch pieces. Lay cut-side down in greased 8-inch layer cake pan. Bake (425°F.) 25 minutes or until browned. Serve with mushroom sauce or gravy. Serves six.

BEEF FILLING: Combine all ingredients thoroughly.

You add the insurance of perfect baking results when you add Clabber Girl to your dough mix . . . Just the right rise in your mixing bowl, balanced by that final rise to light and fluffy flavor in the oven.

BISCUIT

2 cups sifted all-purpose flour
2½ teaspoons Clabber Girl Baking Powder
½ teaspoon salt
6 tbsps. shortening
¾ cup milk
2 tbsps. chopped pimiento

BEEF FILLING

2 cups ground, cooked beef
2 tbsps. diced green pepper
2 tbsps. grated onion
1 teaspoon salt
3 tbsps. catsup
6 tbsps. gravy

CLABBER GIRL
IS NOW *Exclusively* KNOWN AS THE BAKING POWDER WITH THE *Balanced* DOUBLE ACTION
HULMAN & COMPANY TERRE HAUTE INDIANA

Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 135. Visit store nearest you for help with decorating problems.

DAY-n-NIGHT
MAILBOX MARKERS

Reflector lettering—glass beads mirror light at night (like road signs)
Permanent embossed letters and numbers 1½" high
Lifetime aluminum—rustproof
Baked enamel—white beaded letters—black background
Double plate 18" long—reads the same from either side

These attractive markers make thoughtful gifts — and make it easy for friends to find your home DAY n NIGHT. Install in a minute. Any wording you want, up to a total of 15 letters and numbers. PLEASE PRINT CLEARLY.

MAILBOX MARKER
$1.95 POSTPAID

Spear ENGINEERING COMPANY
351A Spear Bldg., Colorado Springs, Colo.
SATISFACTION GUARANTEED OR MONEY BACK

Gets out whole nut kernels

DAZEY CRACKIT SET
(nut cracker)
$5.95

The Famous Dazey Nut Cracker attached to natural finished wood base . . . easy to crack nuts . . . gets out whole nut meats . . . it's fun to use. At Hardware, Home Furnishings, and Department Stores.

Dazite finished with red knob

Be sure it's a DAZEY
ST. LOUIS 7, MO.

Chuck cuts

From page 115

Hungarian Goulash

Makes 8 servings

Brown . . 3 pounds chuck, cut in 1-inch cubes, in
2 tablespoons lard
Add . . . . 2 cups diced onion
1 teaspoon paprika
2 teaspoons salt
⅛ teaspoon pepper
1 teaspoon caraway seeds
2 cups water
Cover and simmer for 2 hours.
Add . . . . 6 medium potatoes, cubed
Continue cooking for 30 to 40 minutes, or until tender.
Combine ¼ cup flour
¼ cup water
Thicken goulash with flour-and-water paste.

Herb Pot Roast

Makes 8 servings

Dredge . . 4 pounds arm chuck roast in
¾ cup flour
Brown in 3 tablespoons melted lard
Add . . . . 1½ teaspoons salt
½ teaspoon pepper
Place meat in Dutch oven.
Combine ½ cup hot water
¼ teaspoon basil
¼ teaspoon rosemary
Pour the herb liquid around the roast, and just a little over the top of the meat.
Add . . . . 2 tablespoons chopped onion
Cover and place in a 325° oven, or set Dutch oven over low heat on the range.
Cook for 2½ to 3 hours, or until meat is tender.
Add more liquid in small amounts, if necessary.

Chilean Pot Roast

Makes 6 servings

Brown . . . 3-pound chuck pot roast in
3 tablespoons lard
Add . . . . 2 teaspoons salt
¼ teaspoon pepper
1 teaspoon chili powder
Drain and save juice from
1 No. 2 can (2¼ cups) tomatoes
Add to meat
juice, drained from tomatoes
Cover tightly and place in a 300° oven, or set over low heat on the range.
Cook for about 2½ hours, or until meat is almost tender.
Add additional liquid, if necessary.
Add . . . . drained tomatoes
1 No. 2 can (2½ cups) kidney beans
Simmer for 15 minutes.
Remove meat and vegetables.
Thicken liquid with paste made of:
4 tablespoons flour
½ cup water.

Chuck Steak in Mushroom Sauce

Makes 4 servings

Combine 1/4 cup flour
2 teaspoons salt
1/4 teaspoon pepper

Rub mixture into
1 1/2 pounds chuck steak, 1/2 inch thick

Brown slowly on both sides in hot skillet.

Add ..... 1 cup diced celery
1 10 1/2-ounce can mushroom soup

Cover tightly and simmer about 1 hour, or until meat is tender.

Sauerbraten

Makes 6 servings

Brown ... 4 pounds beef chuck roast in
2 tablespoons fat

Add ..... 1 cup vinegar
1 cup water
1/2 teaspoon whole pepper
1/2 teaspoon whole cloves
2 bay leaves
1/2 teaspoon ginger
1/2 cup sliced onion
1/2 cup sliced lemon
1/4 cup sugar
1 teaspoon salt
few grains pepper

Cover tightly and simmer slowly 2 to 3 hours, or until tender.

Thicken liquid with paste made of:
1/2 cup flour
1/2 cup water. END

Rain after drouth

At noon the farmer sensed the coming rain—
The western sky had turned a darker blue;
Against it lay the bleached and stricken grain,
And on a gust of air the farmer knew
Once more the smell of moisture, fresh and sweet,
That charged the atmosphere above the wheat.

He felt no urge to seek a sheltered place . . .
Remembering searing suns and brassy days;
He wished to feel the rain against his face
Instead of dust and penetrating rays,
And if the storm should break about his head
He would be glad and wholly comforted.

The storm began, and, after weeks of blight,
The farmer sensed renewal once again,
And suddenly he knew with pure delight
The miracle and radiance of rain
That could return to earth and stalk and leaf
With cool, atoning fingers of relief.

— *Reid Crowell*

For a NEW flavor thrill...
"COLLEGE EDUCATED" COFFEE *

*A great American university conducted exhaustive research to find the best coffee-maker design for making good coffee every time. Wear-Ever perks and drips are built to these scientific specifications.

These coffee-makers are made of gleaming, friendly-to-flavor Wear-Ever Aluminum. Strong, durable and long-lasting . . . built to take the abuse of everyday use.

PERCOLATORS		DRIP POTS	
4 cup	$3.25	4 cup	$3.75
6 cup	3.50	6 cup	4.25
8 cup	3.75	8 cup	4.50

Ask for prices on other sizes. They're at your favorite department, hardware or housewares store NOW!

(All prices slightly higher in the West)

See WEAR-EVER on the ALCOA Program, "SEE IT NOW" over the CBS-TV Network, every Sunday.

Friendly to Flavor
WEAR•EVER
Aluminum Coffee Makers

© TACUCO 1952

THE ALUMINUM COOKING UTENSIL CO., DEPT. 5710, NEW KENSINGTON, PA.

Um-m-m
double good
'cause it's
double
flavored

It's smooth and creamy ...and it's double flavored!

Copyright 1952, C. C. Co.

The PLAY

Where Playfellows

The No-good Ghost

Have you ever been in Goblin City? I guess not. Only ghosts and witches live there. And most of the year it's quiet as a graveyard. But not on Halloween.

On Halloween, witches swoop around on their broomsticks. Ghosts float through brick walls and call, "*Ho-o-o-t.*" The grown-up ghosts practice tricks, and little ghosts who have passed their haunting tests get ready to play ghost with the grownups.

But little Gordon Ghost isn't going anywhere. He just floats around a cobwebby corner with a fat tear rolling down his cheek, crying, "Whoo-ee, I'm just a no-good ghost."

You see, Gordon didn't pass his haunting test. Gordon did well on the first part of the test. He floated off the ground of Goblin City at a great height. Grampa Ghost, who gave the test, told Gordon that he floated better than any of the other little ghosts. But, for the last part of the test, small Nelly Ghost dressed just like a real-life child. Gordon was to jump out from his cobwebby corner and frighten her with a horrible "ho-o-o-t." But when Nelly walked past Gordon's corner, he just couldn't try to frighten her. Gordon was such a friendly ghost that he couldn't frighten anyone . . . not even another ghost!

So Gordon had to stay home on Halloween night. All of the other ghosts and witches left Goblin City for their night of haunting. He was all alone. Poor Gordon just floated to his favorite corner and began to cry.

Suddenly, close by he heard a small noise like the fluttering of wings. He looked up from his crying to see a bright little white figure with wings and a golden circle around its head. "Don't cry,

HOUSE

meet every month

Gordon," it told him. "I'm Alex Angel. I've come to make you happy." And with that, Alex Angel pinned a pair of wings, just like his own, on Gordon's shoulders. Then he put a golden circle around Gordon's head and said, "Now you are an angel."

Gordon was puzzled. "What's an angel?" he asked.

"An angel?" Alex replied. "Why, an angel does good for everyone. On Halloween it's an angel's job to watch over little children and see that the ghosts and witches don't get a chance to frighten them. No ghost will frighten a child when an angel is around!"

Gordon liked that idea. He hadn't wanted to frighten children. He thought being an angel sounded like more fun than being a ghost!

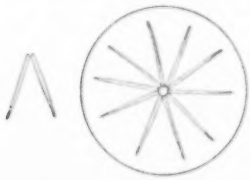
"But how many angels are there?" he asked.

"Oh," said Alex, "for every ghost there are 10,000 angels. And we angels don't just work on Halloween. We work every day of the year helping to make little children happy. Come on! We have work to do!"

And that is how Gordon, the no-good ghost, became Gordon, the do-good angel.

Water magic. Bend a toothpick so that it will make a "V" like the drawing on the left below. Be careful not to let it break completely in two.

Bend 4 more toothpicks in just the same

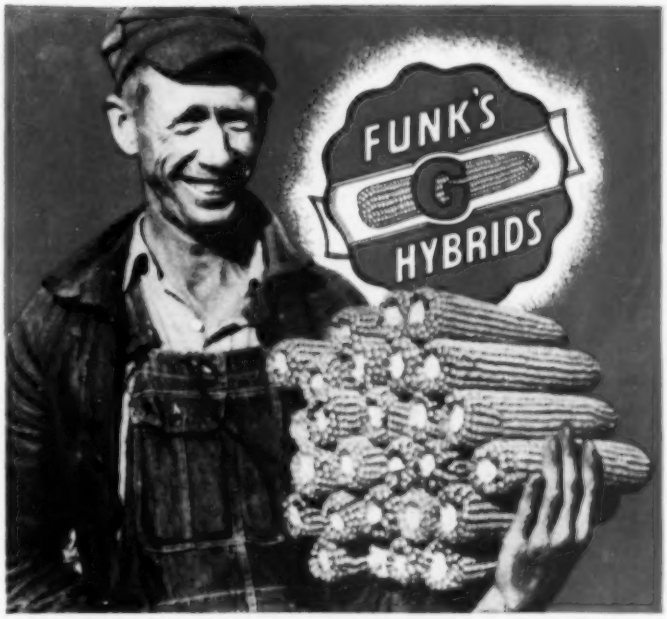


way and place them all in a flat dish to form a 10-pointed star like the drawing on the right.

Now, place a drop of water at the center of the star and watch the magic work. You will see the toothpicks move into a 5-pointed star right before your very eyes.

Hey riddle-diddle

1. What has a mouth and a fork, but never eats? *A river.*
2. Why does an engine do what it is told? *Because it is afraid of the switches.*
3. What always keeps an eye open, but never sees a thing? *A needle.*
4. If all the seas on earth dried up, what would Neptune say? *I haven't an ocean (notion).*



This is what *Consistently Good* means to you

LAST YEAR—The coldest, shortest growing season most of us ever saw. Fast starting, rapid growing Funk's G-Hybrids came through where other hybrids just couldn't get the job done.

THIS YEAR—Early favorable moisture across the Corn Belt; later, drouth in some areas; borers, leaf blight and other insect and sisease problems "spotty." Balanced performing Funk's G-Hybrids (with bred-in 5-Star Qualities) now are pushing down the home stretch to the top yields of top quality corn in your neighborhood—no matter where you live.

EVERY YEAR

Any hybrid can make a good showing in a good season—but you can't depend on luck to beat weather, insects and disease that are always a threat to your crop. For extra bushels of well-finished, mature corn on strong standing stalks EVERY YEAR . . . depend on Balanced Performing Funk's G-Hybrids.

More Farmers than Ever Before Planted Funk's G-Hybrid Seed Corn in 1952

Say: "FUNK'S G FOR ME IN '53!"

RESEARCH MAKES FUNK'S G-HYBRIDS *Consistently Good* . . . Year After Year

Balanced PERFORMANCE
- ★ RAPID GROWING
- ★ DISEASE RESISTANCE
- ★ INSECT RESISTANCE
- ★ DROUTH RESISTANCE
- ★ STANDABILITY

FUNK BROS. SEED CO.
BLOOMINGTON, ILLINOIS
AND ASSOCIATE PRODUCERS OF FUNK'S G-HYBRIDS

"FIRE AT NIGHT

on my farm...with six children asleep upstairs—**STOPPED** by your **RED COMET Automatics"**

...says ELMER JOHNSON
Rancher, Moore, Idaho

"...the fire was caused by a gas explosion in the kitchen. Six children were asleep in an upstairs bedroom, right over the kitchen. The Red Comet Automatic Fire Extinguishers put the fire out quickly. If it hadn't been for the Red Comet Automatics, in less than ten minutes the whole house would have been in flames."*

PROTECT your family, farm buildings, machinery and livestock from fire—with Red Comets. Red Comet Automatic Fire Extinguishers give day-and-night protection against fire—**at low cost**—no matter where you live.

At the outbreak of fire, Red Comet's fire-killing chemical goes into swift action—automatically. Harmless to clothing and finest furnishings. The attractive unit is easily installed on walls or ceiling. No wiring or water connections. Red Comets have been used successfully for over 20 years in all 48 states and in 32 foreign countries. First low cost is the only cost.

Be prepared when fire strikes! Fire protection—**at low cost**—with Red Comet Automatic Fire Extinguishers.

*LETTER ON FILE IN OFFICES OF RED COMET, INC.

RED COMET AUTOMATIC Farm Fire Extinguishers STOP FIRES in seconds—*without human aid!*

Retired Farmer Makes $400 Mo.
Thomas Campbell, Kimball, Nebr., finds it easy to sell Red Comets.

Big Money in Spare Time
Ed Weigt, Jerome, Idaho, sold $435.15 Red Comets in first week.

Extra Money Selling Red Comet
Wm. J. Lott, Jr., Pittsburgh, Pa., earns over $300 a month in spare time.

Full Time Salesman Makes $12,000
Ed Barth, Worthington, Ohio, makes $12,000 a year selling Red Comets.

RED COMET, Inc.
22B Red Comet Building • Littleton, Colorado

FREE MAIL THIS COUPON for information showing 31 Common Fire Hazards.
Red Comet, Inc. 5BC, Red Comet Bldg., Littleton, Colo.
☐ Send me FREE your new fully illustrated Folder in color, showing **31 Common Fire Hazards** and how Farm property can be protected from fire.
Name
Street or R.F.D.
P.O. State
☐ CHECK HERE for Money-Making Plan and FREE Demonstration Kit with new, helpful Sales Manual. Introduce Red Comets to friends, neighbors. Spare or full time. No capital or experience necessary.

Men Wanted to Sell Red Comets
MORE MONEY IN SPARE TIME
Need extra money? Do as hundreds of ambitious men are doing—sell Red Comet Automatic Fire Extinguishers in your spare time. Proved Sales Demonstration Kit makes selling Red Comets easy, shows you how to start earning the first day. Nothing to invest. CHECK COUPON, mail today!
Check Bottom Box • Make Money in Spare Time!

SEWAGE BREEDS DISEASE
Eliminate Smells and Troubles from Outdoor Toilets, Cesspools and Septic Tanks with
Enzymatic—the revolutionary multiple-enzyme powder eliminates odor, liquefies and digests solids. Start your protection with $1.50 pkg.—complete with instructions. If dealer can't supply, sent postpaid by
N. O. NELSON CO.
P. O. Box 3203 DEPT. A-10
ST. LOUIS 1, MISSOURI
MONEY-BACK GUARANTEE If not entirely satisfied

An invitation to you

This year marks *Successful Farming's* Golden Anniversary. If you and your family are in Des Moines during the coming months, do stop in and visit with us, won't you? Special guides will be on hand to show you how your magazine is published. We'll look forward to seeing you. *The Editors.*

SPEED-UP
Farmall F-20, F-30, Reg. Mod.
Old John Deere A & B's
Behlen Hi-Speed Gear Box gives old model John Deere A or B two road speeds—9 and 15 m.p.h. For Farmall F-20, F-30, or Regular Model you get 15 m.p.h. gear box, or you can have 10 m.p.h. speed for F-20 or for Regular Model. Installed with or without Lift-All Pump. Does not interfere with present gears. Write for particulars, stating make, model of tractor.

Behlen Mfg. Co., Dept 12, Columbus, Neb.

How to cut down on accidents

One of the best ways farm people can reduce accidents is to keep a careful record of what accidents are happening and the causes. People tend to avoid accidents by their alertness, according to David Steinicke, Michigan State College extension safety specialist.

He enlisted the aid of Farm Bureau groups in 58 Michigan counties to find out what is causing farm accidents. In a typical 4-month period, January through April, 1952, a total of 189 persons were reported injured by accidents. Many could have been prevented.

Unsafe methods led the field of contributing factors to accidents, causing 62 injuries. Hurrying caused 57 injuries. In 18 cases safety devices were not used and an accident resulted. Being tired helped 12 accidents happen, and in another 12 cases the person lacked training for the job. Other accidents were caused by miscellaneous factors.

Falls were the most frequent type of accident reported, with 55 persons involved. Thirty-nine were injured by machines, 38 by autos, 12 by animals, and 3 by fire. The rest of the accidents were other types.

Some were luckier than others as to results of the accidents. In 68 of the cases, bruises resulted. Cuts occurred in 53. Some of the others were more unfortunate—45 suffered broken bones, 7 had concussions, 5 had amputations as a result. The rest reported other injuries.

The need for being safety-conscious at all times is shown by the fact that 79 of the accidents were reported at work, 54 in the home, 33 in traffic, and the rest in miscellaneous places. Steinicke emphasizes that accidents can happen any time one fails to be alert for accident hazards. —*W. E. S., Michigan.*

SUCCESSFUL FARMING

"A date? Oh, glad, I'd be yes to!"

The "Gobble-uns" were gobbled up

—— by electricity and "Your Unseen Friend"

"TO BED, to bed, you sleepy head!"

And, with mother carrying the lamp, up you went, scared of your own shadow! Only you thought it was "gobble-uns" – big, fearsome, shadowy "gobble-uns" that *git you ef you don't watch out.*

But, today, those scary "gobble-uns" are gone.

The electric light bulb killed 'em off. "Your Unseen Friend" had a hand in their passing, too.

Most incandescent lamps have lead-in wires made partly of Nickel because it has just the right kind of mechanical properties . . . partly of a special Nickel alloy that expands on heating at the same rate as glass. And this Nickel helps bulb makers produce longer-lasting lamps.

It also helps light these lamps: helps electric light and power companies bring you current that costs about one-third less today than in the twenties, while most family budget items went up. One of America's many *production-for-freedom* miracles!

How was this miracle achieved? Well, power companies and their equipment suppliers found ways to get about twice as much electrical energy from each pound of fuel. This increased efficiency means improved generating methods which require equipment operating at much higher pressures and temperatures. This, in turn, calls for Nickel and Nickel-containing alloys...metals that resist corrosion and stand right up to terrific heat and pressure.

Inco Nickel is helping industry serve you better ...by producing more and more for less and less ...the American way. You seldom see it, though, because it's usually intermixed with other metals to add strength, toughness, or other properties.

That is why Inco Nickel is called "Your Unseen Friend."

© 1952 T.I.N. Co.

You and "Your Unseen Friend": *morning, noon and night, Inco Nickel is always with you – helping to make your life easier, brighter, more worthwhile. Just how? "The Romance of Nickel" tells you. Send for your free copy. Write The International Nickel Company, Inc., Dept. 921a, New York 5, N. Y.*

Inco Nickel Your Unseen Friend

INCO The INTERNATIONAL NICKEL COMPANY, Inc.

Wish I had Bought **GLOBE** a Long Time Ago . . .

says D. L.—
Oneida, Illinois

I *NOW* Milk in Half the Time
With Only ⅓ the work, Thanks to my . . .

GLOBE 1-2-3-4 *Rhythm* **MILKER**

Yes, when milking times roll around, your GLOBE New Improved *1-2-3-4* Rhythm Milker is the best hired hand you can have.

GLOBE GUARANTEES YOU BETTER, FASTER MILKING AT THE LOWEST COST!

THESE AND THOUSANDS MORE GLOBE OWNERS KNOW THIS TO BE TRUE . . .

Here are the Famous Globe Features That Mean More Milk — Less Work—

Fast, Gentle Milking
Simplified Cleaning
Positive Pulsation
1-2-3-4 Milking Rhythm
Precision Construction
No Pipelines
Low Operating Cost
All Weather Dependability
Fingertip Control
Massaging Action

"Globe saves us lots of time. It's so easy to clean and operate. No pipelines to install, just plug in and you're ready to milk. We've got more milk from our cows since using Globe. If we ever buy another milker, you can be sure it will be a GLOBE!" O. B. Mascoutah, Ill.

"My Globe Milker is the best hired hand any dairyman ever had. It milks fast and clean. With Globe I get more milk in about half the time." G. H. Chesaning, Mich.

"Our Globe beats any milker we have ever used. It does a thorough job of milking, and our cows like Globe's gentle milking rhythm." C. C. & Sons Swatara, Minn.

YOU CAN AFFORD A GLOBE!

Globe save ⅓rd Low Price will amaze you. Find out why Globe Owners are SO SOLD on GLOBE . . . write today for full information on Globe's Better, Faster Milking Guarantee . . . The Globe pamphlet, "The Experience of Globe Users" . . . And for Globe's Today's Plus Value, Globe's "Any Two" Christmas Special lovely gifts to every Buyer of a Globe Milker NOW.

YOU CAN'T AFFORD NOT TO OWN A GLOBE

GLOBE MILKER COMPANY
1ST & COURT DES MOINES, IOWA

Enjoy better farm living . . .

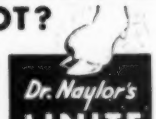
. . . by letting *Successful Farming* continue to help you solve all your farm problems.

HOOF ROT?

CANKER — THRUSH

A powerful, penetrating antiseptic for stubborn hoof conditions, fungus infections. Easy to apply—pour it on. 12 oz bottle —$1.00 at your dealer's, or by mail postpaid.

H. W. Naylor Co., Morris 11, N. Y.



Dr. Naylor's LINITE

Successful Farming serves the farm families in the nation's agricultural Heart. Reach these best farm families in the best farming area with your classified advertisement. Write for details.

FEEL BETTER FAST!

BAYER ASPIRIN

RELIEVES PAIN AND DISCOMFORT OF **COLDS**

A FAST WAY TO

KILL RATS

use CYANOGAS®

A gas-producing powder... not a bait. Simply dust it into burrows... **RATS DIE QUICKLY.** **EASY TO USE**—Full directions in each can. 1 lb. . . . $1.00. **Also large economy sizes.** At Drug, Hardware, Seed, Feed Stores.

AMERICAN CYANAMID COMPANY
30F Rockefeller Plaza • New York 20, N. Y.

Dairy

Trace minerals no Bang's cure

Widespread claims that the feeding of trace minerals will prevent or cure brucellosis in animals or undulant fever in man have been proved false by controlled experiments at the Wisconsin Experiment Station. All required trace minerals were found in the natural feeds given the cattle in the experiments.

Inasmuch as the animals could not use additional amounts, feeding trace minerals wasted materials and time. Trace minerals did not influence the susceptibility of cattle to brucellosis or lessen its effects when the disease was established. And, feeding of trace minerals did not shorten the course of the disease.

However, it is still advisable to feed trace minerals in many areas from a nutritional standpoint, but not for the effect on brucellosis.

Why complex grain mixtures?

Feed analysis tags are getting longer and harder to read. Livestock feeders are wondering if simpler mixtures wouldn't do the job just as well. Here are some observations by S. E. Smith of the Cornell Animal Husbandry Department on both the nutritional and economic aspects of feed mixtures.

From a nutritional point of view, it is often argued that complex mixtures, containing many different feedstuffs, insure high palatability. No one should fail to recognize the importance of palatability of livestock rations, particularly for animals fed for high production. However, this aspect is probably overemphasized. Refusal to consume sufficient concentrates usually is due to reasons other than palatability, such as disease, sudden change in grain mixtures, pasture feeding, or high-quality silage.

Another argument for complex concentrate mixture is that a large variety of grains insures that all nutrients are present. To a limited extent this may be true. However, we know enough about the cow's nutritional requirements that we can and should plan for nutritional adequacy rather than relying on a chance combination. Good results can be obtained with a number of combinations.

At the Ohio Experiment Station, feeding experiments were set up to compare simple and complex grain mixtures, similar in T.D.N. and crude protein, when fed to lactating cows. The simple grain mixture consisted of ground corn, soybean oil meal, salt, and bonemeal. The complex one consisted of ground corn, oats, wheat bran, linseed meal, soybean oil meal, molasses, beet pulp, and mineral additions.

The results show no difference in milk production, both groups averaging in excess of 12,000 pounds of milk per lactation. The experiment concluded that

simple mixtures can give as good results as more complex ones, if comparable amounts of T.D.N., protein, and minerals are furnished.

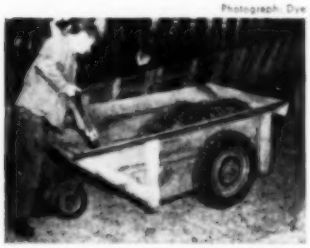
From the viewpoint of economics, there may be a valid reason for favoring more complex concentrate mixtures under some conditions. Market prices of feedstuffs are not reliable indications of relative feeding value. Rather, market prices reflect the laws of supply and demand by human consumers, not cows. As a result, a particular feed may at times sell for a considerably higher price than its relative feeding value. By taking advantage of such fluctuating prices, you can add the "good buy" feed to the usual run of livestock feeds such as corn, oats, barley, and important protein supplements and thus lower the cost of the ration without lowering its nutritional value.

It seems the logical reason for feeding complex concentrate mixtures is economic rather than nutritional. They are justified to the extent that they lower the cost of production.

Speeds up silage feeding

Silage feeding is speeded up on the Robert Edwards farm in Macon County, Missouri, with the three-wheeled carrier pictured below. One man can easily move

Photograph: Dye



500 pounds in the low-slung carrier. A small crazy-wheel allows cart to be pushed or pulled easily. The cart is designed to catch silage as it falls down silo chute.—*O. D., Missouri.*

Instant heat in milkhouse

A battery of heat lamps gives Bryce Tracy, York County, Nebraska, instant heat in his milkhouse during the winter. The lamps hang over the washing vat.

A thermostat automatically turns the lamps on and off. It is set at 32 degrees, just warm enough to keep pipes from freezing. While washing utensils, Tracy temporarily runs the thermostat up to 50 or 60 degrees.

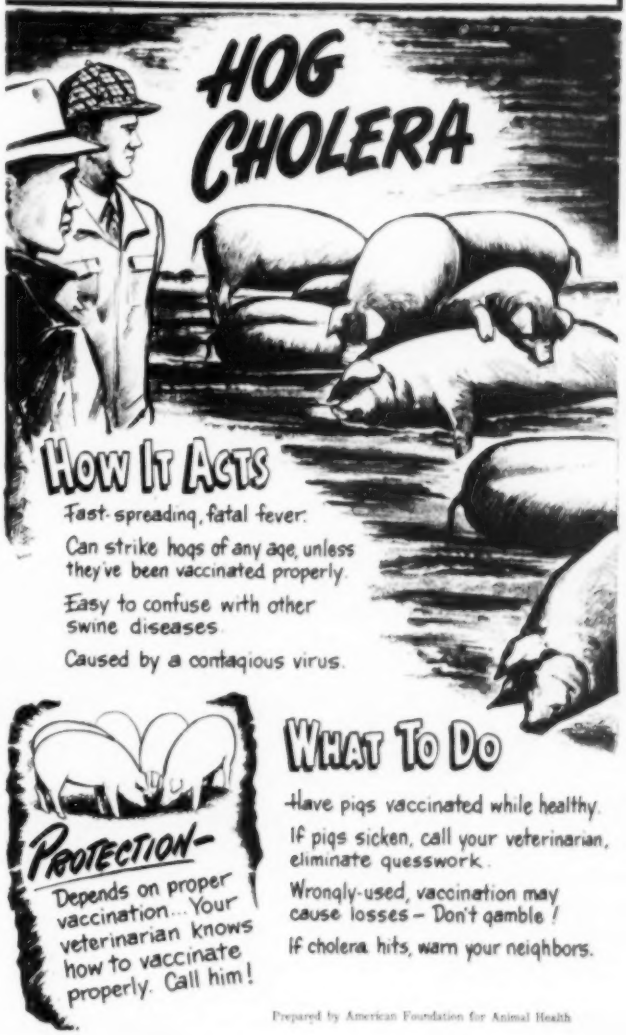
Do you have a question?

Through our Farm and Home Service Bureau, *Successful Farming* offers you personal-letter help with your problems without charge. Please outline all details of your question clearly when you write. If referring to an article in the magazine, mention page number and month of issue.

Address your inquiry to The Farm and Home Service Bureau, *Successful Farming*, Des Moines 3, Iowa.

KNOW YOUR LIVESTOCK PROBLEMS

Another in the series "What the Veterinary Profession Means to Mankind"



Prepared by American Foundation for Animal Health

For friendly help with your building, furnishing or decorating problems, visit the store nearest you offering **Successful Farming's** home planning service. Stores are listed on page 135.

Do you know this man?

He's Your Authority

on fall and winter needs. His advice will save you effort, time and money.

Visit your *irha* hardwareman and get acquainted. Let him help you with your *Fall Lawn Needs.*

There's no better man to consult regarding *Heaters* and *Fireplace Equipment.* He has all the answers to your *Painting Requirements.*

He's the man to see about making your home secure with *Roofing Materials* and *Weather Stripping.*

And he is an expert on *Sporting Goods!* You can identify this man's store by the red, white and blue *irha* emblem.

Published in the Interest of More than 22,000 Independent, Home Owned Hardware Stores Pledged to Service, Quality and Value.

NATIONAL AND AFFILIATED RETAIL HARDWARE ASSOCIATIONS

Successful shortcuts

Build them yourself, save time and dollars

McVicker

Post peeler was built by W. S. Fields, Jr., of Virginia. Fields used a beater from an old threshing machine, removed the bars, and replaced them with chains. Peeler should be equipped with a guard over the top to prevent chips from injuring the operator

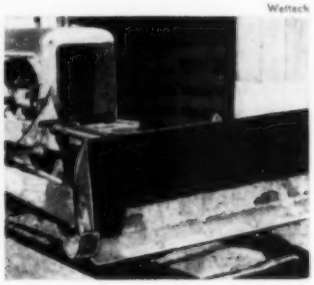
Curtis

Stirring rod was made to fit the drill press on Raymond Morris' farm, Garden City, Kansas. Stirring rod is used for mixing paint or chemicals for insect spraying

Chapin

Grain buckets in the milking parlor were made from the bottoms of old milk cans by Oscar Borden, Schaghticoke, New York. Buckets are welded to short lengths of pipe so they can be pivoted easily for filling

Wettach



Bulldozer was made from one-half of an old boiler fitted with an old road-grader blade for a cutting edge. Clifford Cruzen, Maha-ska County, Iowa, built the bulldozer. It is mounted on manure-loader arms

McCain

Corn dump is permanently placed in the lane along the steer feedlot on Roland Miller's farm, Heyworth, Illinois. The elevator dumps grain directly into a big self-feeder. The dump is operated by an electric motor mounted on the elevator

Making the most of MECHANIZED FARMING

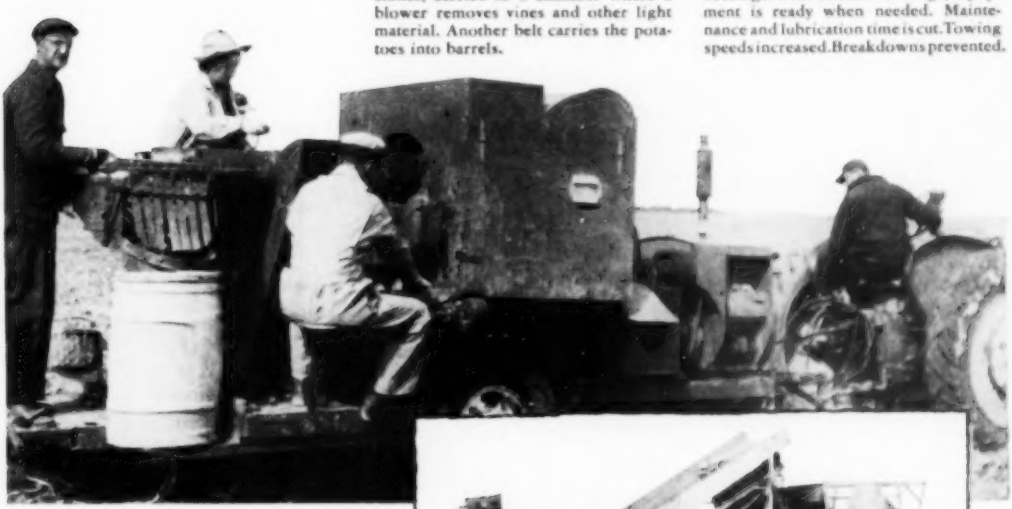
BETTER MACHINES MEAN BETTER FARMING . . . TIMKEN BEARINGS MEAN BETTER MACHINES

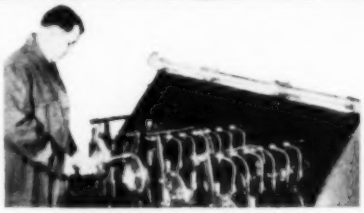
1. AROOSTOOK FARMERS CUT HARVESTING COSTS 60% WITH POTATO "DIGGER-PICKER"

Invented by two Aroostook, Maine, farmers, this potato harvester digs a potato row and picks it at the same time, cutting harvesting costs 60¢.

The dug potatoes are scooped onto a conveyor belt, sifted of dirt and small stones, carried to a chamber where a blower removes vines and other light material. Another belt carries the potatoes into barrels.

This is just one more example of how mechanization is building profits for the American farmer. To help you make the most of mechanized farming, implement manufacturers are mounting more moving parts on Timken® tapered roller bearings. With Timken bearings, equipment is ready when needed. Maintenance and lubrication time is cut. Towing speeds increased. Breakdowns prevented.





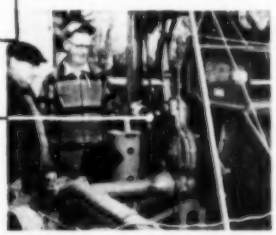
2. BETTER BEARINGS FOR BETTER IMPLEMENTS

This testing device helps determine how long tractor and implement bearings will stand up under heavy loads. It's typical of how engineers of the Timken Company work together with implement makers to assure top bearing performance.

3. BUILD A BALE CARRIER!

On two old auto axles and wheels a Pennsylvania farmer built this handy bale carrier. The elevator takes the bales from the baler, drops them into the sloping box in the back.

$10 FOR IDEAS: Do you have an idea like this on making the most of mechanized farming? We'll pay $10 for each idea that we accept and publish. Send photo of implement and description to the Timken Company, Dept. SF-10, Canton 6, Ohio.



4. CLUE TO TOP VALUE

You can be sure of getting the most for your money when you see the "Timken Bearing Equipped" label on an implement or tractor. Timken tapered roller bearings hold moving parts in positive alignment. They reduce wear and practically eliminate friction. The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".

Tapered Roller
TIMKEN BEARING
EQUIPPED

This symbol on a product means its bearings are the best. Look for it when you buy.

NOT JUST A BALL ◯ NOT JUST A ROLLER ▭ THE TIMKEN TAPERED ROLLER ▭ BEARING TAKES RADIAL AND THRUST → ← LOADS OR ANY COMBINATION

LOOK WHAT $292.00 BUYS

Springfield

3 H.P. GARDEN TRACTOR with SAW ATTACHMENT

Cut wood, remove brush, make posts the Springfield way . . . and have a machine that does over 24 other jobs, too!

When you want to buy a portable saw, your best buy is a Springfield garden tractor.

For less than $300 you get a big, husky 3 h.p. Springfield garden tractor equipped with a 20" saw and saw attachment. It really does the job. But best of all, you own a machine that you can use 12 months a year for other work also.

By adding inexpensive attachments you can shovel snow . . . grade . . . plow . . . disc . . . cultivate . . . haul . . . roll . . . mow . . . and do other similar jobs.

Look at those wide, rugged tires. Look at that rugged 3 h.p. engine (also available in 2 and 2½ h.p.) . . . that welded steel, box-type frame . . . that perfect operating balance. Here is garden tractor design at its best. Here is the way to do work at its easiest.

See a Springfield at your dealer, or write to factory for free literature.

**Plus freight and local taxes if any*

SAVE WORK IN WINTER . . . SAVE WORK IN SUMMER

TRIM BRUSH with new circular weed cutter.

SHOVEL SNOW with heavy-duty 36" grader.

PLOW smooth, even furrows. 6½" or 8" plow.

CULTIVATE with this heavy-duty cultivator.

A product of Quick Manufacturing, Inc., 3241 E. Main St., Springfield, Ohio

Eggs

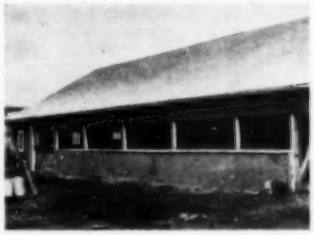
From page 39

says Krasny. "The best-size farm flock runs from 1,000 to 2,000 hens."

Building program grew, too. Flock size grew just as fast as their building progressed. A major portion of this program consisted of converting unused buildings, such as a horse barn and sheep shed, into suitable poultry buildings. Also included is a new laying house, 26'x70', built from native lumber.

Eggs are marketed direct. The Krasnys are set up to do their own candling, grading, and delivering. Eggs are gathered from three to four times a day in wire baskets and held overnight in a cool basement. The eggs are cased the next morning. Deliveries are twice a week.

Eggs are gathered three to four times a day to help maintain quality. Community nests cut down breaking, speed gathering



Converted buildings allowed expanding flock from 300 to 2,000 in seven years. Above is sheep shed converted to poultry

Eggs are delivered to customers twice a week. Candling and grading are done on farm, assuring customers of high quality

Before casing, each egg is checked and graded according to quality and size. The eggs run about one grade above United States Department of Agriculture standards. Egg prices run about the same the year round; however, the margin is biggest during the summer months when everyone else is taking a beating in price.

He keeps mostly hybrid chickens. Hybrid chickens have just about taken over on the Krasny poultry flock. According to Krasny, there's a good reason for this. "Hybrid chicks lay for a longer period (12 to 15 months) than do the regular egg-laying breeds," he says. "This helps rule out the possibility of a summer slump when a sufficient supply of eggs is often hard to get with standard breeds."

Starts several batches of chicks. Another trick Krasny uses to keep the hens producing a constant, year-round supply of eggs is to start chicks at different times of the year. This cuts down on the number of pullet eggs at one time and takes out some of the unevenness in production, especially during the summer months.

The chicks are started on a scratch grain of mixed corn, wheat, and oats plus grit. This feed is fed on a paper the first day. Mash feeding starts on the second day. At the end of 3 weeks, oats feeding is started and gradually increased, until at 3 months of age the chicks' ration consists of 50 percent mash, 50 percent grains (85 percent oats and 15 percent corn and wheat).

Good feed necessary. Few poultrymen can match the production record of the Krasnys' hens. Their feeding program gets a lot of credit for helping to hold the production at a 75-to-80-percent clip the year round. A high-protein concentrate is mixed with home-grown grain to make an 18-percent laying mash. Feeds are fed cafeteria style. On top of that, the hens get an evening grain feeding of 85 percent oats and 15 percent wheat and corn, all fed in the hopper.

Oystershell and grit are kept before the laying hens at all times. Grit is placed right in the hopper with the feed. An all-night light encourages the hens to eat more feed and drink more water.

Keeps all-pullet flock. At the end of 12 to 15 months of production, all the old hens are sold. Gradually a new bunch of pullets replaces the old hens. As the hens are of different ages, only one batch at a time is replaced with pullets.

Keep close records. "You have to know where every penny is coming from and where it's going in any farming business," says Krasny, "and poultry raising is no exception." They keep records on production, feed, and mortality.

All these little extras require additional attention by the Krasnys, but it's paying off in the long run. Poultry isn't a side line on their farm—it's their major source of income. They're making sure they're paid for their extra trouble by selling eggs directly to the customer. END

"Up 30 years . . . and still has lots of service left,"

says Kendall Gibson of his AMERICAN FENCE

● Mr. Gibson of Kirkwood, Illinois, operates 1300 acres of farm land and markets around 200 head of Herefords and 1,000 hogs a year. He raises all his own feed. About his fence layout, Mr. Gibson says . . .

"We have about 20 miles of American Fence on these farms. There's so much of it that the fence has got to stay tight . . . we use American because it gives us the least trouble. Some of it has been up for 30 years . . . and still has a lot of service left. We use steel posts, too—especially on temporary fences that may have to be moved, because they save so much time."

Whether you are raising cattle, hogs, sheep or poultry, there's a U·S·S American Fence to fit your needs exactly . . . to serve you through the years with the least possible repairs. Ask your American Fence dealer for details.

6 favorite features of American Fence

1. Properly galvanized wires
2. Hinged joint construction keeps its shape
3. Tension curve allows for expansion and contraction
4. Full gauge wires
5. Correct spacing of wires
6. Full length and width

AMERICAN STEEL & WIRE DIVISION
UNITED STATES STEEL COMPANY, GENERAL OFFICES: CLEVELAND, OHIO
COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO
TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA.
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

U·S·S AMERICAN FENCE

There's more American Fence in use than any other brand!

USS

UNITED STATES STEEL

Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 135. Visit store nearest you for help with decorating problems.

BUNIONS

Enlarged or Tender Joints Quickly Relieved!

Dr. Scholl's Zino-pads quickly relieve painful pressure on the sensitive spot . . . soothe, cushion, protect it. Enjoy real relief as millions do with Dr. Scholl's—world's largest selling foot aids.

Dr Scholls Zino-pads

LEARN TO TRAP

New 32 page Catalog and Book of Methods, and information mailed FREE. Describes traps, baits and equipment available at lower than usual prices.

FUN AND PROFIT

Your spare time is worth BIG MONEY if spent trapping. Let TAYLOR help you. Write

F. C. TAYLOR FUR CO.

Dept. 3
480 S. 7th St. ST. LOUIS 2, MO.

"this triangle trademark means quality to me!"

That's James Little, R. 4, Janesville, Wisconsin, talking. He runs a 120-acre dairy farm with a milkherd of 40 Holsteins, and raises 60 market hogs a year. Mr. Little's ten-foot tandem Case Disc Harrow equipped with LaBelle Discs gets a workout.

Here's more from Jim: "I worked 300 acres last year, and there's no sign of disc wear—no nicks—they're as good as new. If I set my disc, she'll set right in to the arbor bolt. When I have to buy disc blades, they'll be LaBelle again."

Thanks, Jim. Users of LaBelle Discs have been telling us this for more than 70 years. That's because Crucible's integrated steel operation enables us to build quality and durability right in; our own craftsmen make the steel that goes into *every* "slow-tempered" LaBelle Disc.

Look for the triangular trade mark of LaBelle, your mark of quality, available for every disc harrow or plow ever made; for your kind of farming.

CRUCIBLE

AGRICULTURAL STEELS

CRUCIBLE STEEL COMPANY OF AMERICA
OLIVER BUILDING, PITTSBURGH, PA.

STAINLESS • REX HIGH SPEED • TOOL • ALLOY
MACHINERY • SPECIAL PURPOSE STEELS

YOUTH GOES ON RECORD

Photograph: Fenin

Let us plan our own fun!

Panel members from Seaman High School, Shawnee County, Kansas, are (left to right): Elton Glenn, Carol Wendel, Mary Lee Jennings, Robert Barr, Janet Nash, Lois Perry, Pat Newton. Not in the photograph are James McCoid, Nancy Niccum, and Earl Beck

By Betty Carlson

Of top importance to any teen-ager are healthy recreation and the feeling of belonging to a group. When a teen-ager plans his own social activities with others his own age, his enthusiasm is highest. As a result, he gains confidence and poise, and learns to enjoy and work with people. The boy or girl who has no crowd—who feels he is "different," or that nobody likes him—should be a cause for worry.

These were some of the strong points brought out by this month's panel held at Seaman High School, located some 2 miles from Topeka, Kansas. Taking part in the discussion were members of nine 4-H Clubs in Shawnee County. What these boys and girls like to do for fun, their attitudes toward adult guidance with their recreation, and how they feel about interesting recreation as a help for the errant boy or girl will interest both parents and other young people.

Most of the group agreed with Pat Newton, an attractive blonde senior, on their favorite form of recreation.

Pat: Dancing is my first choice. The best party I ever went to was in 1950 when our club sponsored a county-wide square-dance party. It was easy to get acquainted because everyone was in a party mood. I like to entertain at home, too, because my friends like me better if I invite them over once in a while.

Nancy Niccum: Parties are the most fun when we plan and promote them ourselves. Then everyone shows up and has a good time. One or two adults at a party are all right, but some of us are self-conscious when there are too many grownups around.

Earl Beck: I think planning is the whole key to a good party. You have to keep things going.

Elton Glenn: Just so a party is kept flexible. When you're having fun dancing, for instance, you don't want to stop and play a game just because the committee *planned* it. I always have the best time when the group are the same age; then you all have something in common.

Do *all* the 4-H members enter into these activities?

James McCoid: Most of them do, but some still fail to show up. I doubt if they have much fun. There's nothing to do around here but go someplace to a show or just run around in cars.

Elton: I know if it weren't for our 4-H and other farm organizations that let us have free dances and parties there would be practically nothing for us to do. There are no youth centers in town.

Robert Barr: We had a lot of trouble getting dancing started in our club. No one turned out because they didn't know how to dance and they were afraid to try. Then the recreational schools started.

[*Turn to page 130*

You'll build or remodel better with Gold Bond

Gold Bond Farm Bulletin

WEATHER
Ideal for painting rooms with new Gold Bond Velvet!

Published by NATIONAL GYPSUM COMPANY, Buffalo 2, New York

NOW! A REAL "EASY-GOING" PAINT

You Can't Do a Bad Paint Job on Walls or Ceilings with New Gold Bond Velvet. It Almost Flows on by Itself!

Have you got a room in your home that needs brightening up? Never mind what's on the walls now—paint, plaster, wallboard or even wallpaper. Gold Bond Velvet needs no primer. Just roll or brush on a coat of this surprising new paint. There's no mixing drudgery, no "headachy" paint smell.

Within one hour, Gold Bond Velvet is dry. You get a velvet-smooth hard-wearing surface that's actually "scrubable" even for crayon marks! Won't chip, crack or peel.

Women like the choice of excitingly *different* colors that Gold Bond Velvet comes in. And they even like to paint with it, because it almost flows on by itself.

Choose the Gold Bond Velvet color you want at your Gold Bond paint or building material dealer's today!

HERE'S THE SECRET!

You can't do a bad paint job with Gold Bond Velvet because there aren't any lap or brush marks. This amazing latex-base paint blends so perfectly that you can even go back and touch up "skip" spots...and never notice them afterwards! And there's no oily mess... brush and roller are easy to clean with *water*. Spatter spots clean up with a damp cloth. No other kind of paint is so easy to use, gives such beautiful results!

EASY TO APPLY! Velvet is ready to use without mixing drudgery. Dip in your roller or brush, and it glides! Velvet eliminates what professional painters call "drag." No lap or brush marks. Touch up as much as you need—Velvet blends in perfectly!

WALLS AND WOODWORK...paint, plaster, wallboard or most wallpapers. You can paint 'em all with Gold Bond Velvet, without any primer or undercoat needed! You can use Velvet in any season without special "airing." It's practically odor-free!

WIPES CLEAN! Gold Bond Velvet is "scrubable." Even crayon marks wipe off. And if you spill or spatter while you're painting, it wipes up with a damp cloth. Brush and roller are easy to clean, too. Just hold them under the water tap.

ASK FOR VELVET. Take your choice from exciting deep colors like Brittany Blue, Navajo Red and others—lovely pastels like Pewter Gray, Surf Green, Colonial Ivory and five others. Also in high light-reflecting Dover White.

It's Easy To Add-A-Room With Gold Bond Paint and Other Gold Bond Remodeling Products!

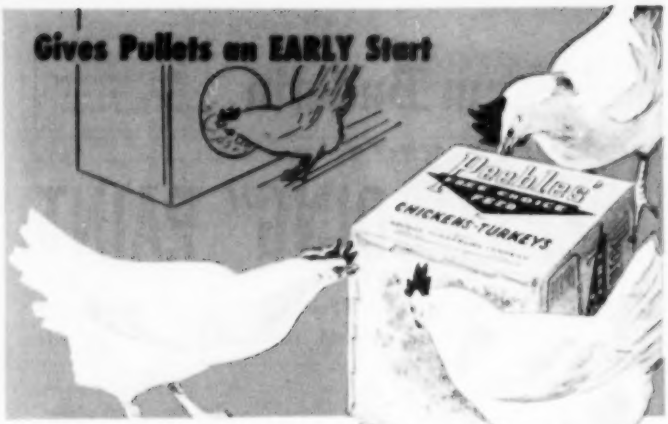
Gold Bond Gypsum Sheathing costs less per square foot than most other sheathing materials. It's knotless, fireproof and water-repellent and saws and nails like lumber.

Gold Bond Rock Wool Insulation is easy to install and is fireproof and permanent. It keeps furnace heat in and stifling summer heat out—cuts fuel bills as much as 50%.

Gold Bond Gypsum Wallboard—Strong fireproof panels for interior walls are easily installed—take any kind of decoration. Gold Bond Tape Joint System entirely covers joints for a smooth surface.

Gold Bond Color Texture—new color decoration that goes on like paint, covers walls like plaster and permits individual texture designs. There's also a complete line of paints for every type interior or exterior of masonry finish.

PAINT-A-ROOM NOW!
with Gold Bond



BOOSTS PRODUCTION 3 WAYS

1. **SHARPENS BIRDS' APPETITES** — whey nutrients in Peebles' Free Choice Feed actually make birds want to eat more of their regular mash and grain. Higher feed consumption means more eggs during late fall and early winter when egg prices are normally higher.

2. **IMPROVES FLOCK CONDITION** — Peebles' helps to keep flocks healthy by toning up digestive systems. It rounds out the regular ration . . . fills in where deficiencies exist . . . lessens disease risks.

3. **SUPPLIES NEEDED NUTRIENTS** — natural, egg-building nutrients. Peebles', made from whey and whey products, contains no filler . . . is as digestible as milk itself.

Write Appleton, Wis., for Free Folder B-10

Gives "Milk-Fed" Results

Peebles'
FREE CHOICE FEED
WESTERN CONDENSING COMPANY
Appleton, Wis., and San Francisco, Calif.

Raise big, husky calves on Peebles' CALF KIT—the ideal Milk Replacement.

NEW MIGHTY FARM
ChainSaw

★ DEVELOPS 5 HP.
★ WEIGHS ONLY 29 LBS.
★ MOST POWER PER POUND

There's never been a gasoline ChainSaw so light in weight that packed so much power. With new automatic chain oiler. Pin-point balance for easy, tireless operation. New die-cast design eliminates needless weight and parts. For free tryout, see your Mall Dealer or write Office listed below.

Send for Free Booklet "A Goldmine in Trees"
REVISED EDITION

MALL TOOL *Company*
7739-G South Chicago Ave.
Chicago 19, Illinois

RELIEVES PAIN OF HEADACHE · NEURALGIA NEURITIS
FAST

The way thousands of physicians and dentists recommend

Anacin® relieves headache, neuralgia, neuritis pain fast because Anacin is like a doctor's prescription—that is, Anacin contains not just one, but a combination of medically proven, active ingredients in easy-to-take tablet form. Thousands have been introduced to Anacin through their own dentist or physicians. If you have never used Anacin, try these tablets yourself for incredibly fast, long-lasting relief from pain. Don't wait. Buy Anacin today.

Let us plan our own fun!

From page 128

Each club in our county sends members to these schools once a year. There they learn new games and dances so they can come back and teach them in their club. I think it's important to have a variety of entertainment so everyone will enjoy at least something.

Elton: The reason some people don't come to dances is that they're shy and have an inferiority complex. They think everyone is watching them and will laugh if they try to dance. Often they put on the bored act and tear around by themselves. Sometimes they get into trouble. This boosts their ego. It's a way of compensating for not belonging.

James: Parents are a lot to blame for that.

Robert: Yes, but when you get to be our age, the people you run around with influence you more than your parents.

Elton: Maybe the answer is for us to build up their confidence by complimenting them once in a while and showing them we'd like to know them better.

Besides dancing, what are some of their other recreation ideas?

Robert: We have "Fun Night" in our club. The parents put on the program for us—usually little skits and take-offs.

Mary Jennings: Our club likes line parties. You start the party at one house and progress to all the members' homes, doing something different each place and ending up with food at the last stop.

Lois Perry: At Christmas time we go caroling at homes of shut-ins and at hospitals and orphanages.

Robert: There's a lot of competition between clubs in the county in baseball, softball, and track. Big crowds turn out for games and meets.

Lois: Some of us play in the 4-H band. Besides putting on concerts, we plan hayrides and sleighing parties. Then there is the dramatics group. They pick their own plays and put them on for the high school.

Elton: One thing is for sure, on a farm you plan your own fun. Otherwise it could be dull.

In many farm communities, it *is dull* for young people. There is little or nothing for them to do. Often, canteens and recreational centers are opened, then closed, not because there is no need for them, but because the adult sponsors did not know what teen-agers want. Many times the boys and girls lose interest because the leaders take too much of the planning on their own shoulders and leave no initiative to the kids. Any activity which is "too supervised" is resented.

These Kansas boys and girls enjoy a well-rounded, satisfying recreational program. The big reason is that they have discovered which activities are most important to them. Then, although they appreciate leadership and cooperate with adults who are responsible for planning, they are able to say, "We plan our own fun." END

Watch hogs for

vesicular exanthema

The past year has been a tough one for hog raisers in some areas because of disease outbreaks. Some months ago, an outbreak of anthrax in a number of Midwestern states caused a good deal of worry on the part of swinemen. That outbreak has quieted down but a new disease has appeared.

A little-known disease called vesicular exanthema has spread from a Western area to at least 14 Midwestern states. Many swine shows have been canceled as a result. Also, some states have put an embargo against shipments of out-of-state hogs.

Occurs only in swine. Vesicular exanthema occurs only in swine and closely resembles foot-and-mouth disease. It takes a laboratory test to determine the difference. As in foot-and-mouth disease, vesicular exanthema shows up as blisters on the snout, lips, tongue, footpads, and skin between the toes.

These blisters are accompanied by fever, sluggishness, loss of appetite, and loss of weight. The first sign of the disease is usually failure of the animals to come for feed. The pigs also may be lame and have to be forced to their feet. The animals may even walk on their fetlocks to take the weight from their feet.

The disease doesn't last long. In most cases, symptoms appear from 24 to 48 hours after contact with the virus. The mouth blisters heal quickly, but the foot blisters may cause lameness for a week or more.

Pigs lose weight. Not many older hogs die from vesicular exanthema. However, the extreme weight loss is what makes this disease so costly to the hog raiser. Heavy death loss may occur among suckling pigs. The blisters in their nostrils cause suffocation.

As yet, raw garbage seems to be the only cause of the disease. The first outbreak occurred in California in 1932 among garbage-fed hogs. However, the disease is transmitted easily from garbage-fed hogs to other herds. It's believed that the present outbreak occurred when Western garbage-fed hogs were brought to the Midwest for slaughter.

At the present time, there seem to be no control measures for the disease. Affected pigs should not be sold for feeding or breeding purposes. Pigs that have the disease should be held in quarantine. Call your veterinarian if you think your hogs have the disease. END

How would you design tires for your farm?

You'd want your tractor tires to do a full day's work in any weather. You'd make a truck tire to give you traction in the fields, mileage on the road. And the tires on your car would float you over ruts, bumps and frost heaves in perfect comfort. And that's exactly what United States Rubber Company engineers did when they designed Gillette Tires especially for your farm needs.

1. **Your tractor** will do a full day's work in any weather, all year long, with the Super Power Bar.

2. **Your car** will get the extra low-pressure ride of Gillette Presidents. Float over rough spots with added traction and mileage.

3. **Your truck** will get off-the-road traction, on-the-road mileage, with the Super Traction Truck Tire.

4. **Your Gillette Dealer** will save you tire dollars on every vehicle you own. His Farm Tire Service means new tire economy for you.

See Gillette's Specialized Farm Line at your Gillette Dealer's today.

A Bear for Wear

GILLETTE *Tires*

DIVISION OF UNITED STATES RUBBER COMPANY

For school and everywhere . . .

A skirt and sweater

By Carol Towers

What bigger thrill than to answer a compliment with . . . "I made it myself"? You'll receive many an admiring glance in your hand-knit sweater and handsome skirt. The sweaters are available exclusively to *Successful Farming* readers. All four are designed for even the most inexperienced knitter, with easy-to-follow, step-by-step directions.

We've teamed each sweater with an Advance Pattern skirt to give you a first-class ensemble for round-the-clock wear. Add your own smart accessory ideas and you'll give each outfit a host of quick changes.

Turtle-neck sweater adds high fashion to winter wardrobes. *7087*

Flared skirt with jaunty pockets invites sweater worn out or tucked in. It's easy to make. *Pattern 5614*

Sweater-blouse is smart as a button under suits, or topping your separate skirts. *7090*

Four-gore skirt is always flattering, looks so smart in many new fabrics. *Pattern 5452*

Open-stitch cardigan makes a wonderful ▶ year-round, go-with-everything style. *7088*

Pert pleated skirt adds slim line with the extra luxury of hidden width. *Pattern 5932*

Raglan-sleeved blouse-sweater goes equally for dressy or sportswear. *7089*

Full skirt with inverted pleats adds taffeta lining for a dressy dash. *Pattern 6178*

For more information on these skirt and sweater patterns, please turn to page 134

"Our husbands claim," Hazel Exon explains, "that the Ladies Club's benefit sewing and charitable work is just an excuse to get together and exchange neighborhood secrets.

"They're joking, of course, but we *do* exchange useful tips. So when members ask how I keep my hands nice in spite of farm work, I'm glad to give credit to Jergens Lotion!

"They tease us about our 'secret' society" says Mrs. James Exon, of Wendell, Idaho

"It's a challenge to run the house *and* help with my husband's work. The resulting abuse to my hands is a challenge soothing Jergens meets completely.

"Idaho potatoes are grand, but every bit as gritty to handle as any other kind. After a sorting session Jergens Lotion is wonderfully soothing for my hands.

"The third generation is starting off right . . . with Jergens. Our whole family uses it, so we always keep Jergens Lotion handy in both kitchen and bath."

Jergens is effective because it doesn't just coat the skin. Jergens Lotion *penetrates* the upper layer and gives it softening moisture. 10¢ to $1.00, plus tax.

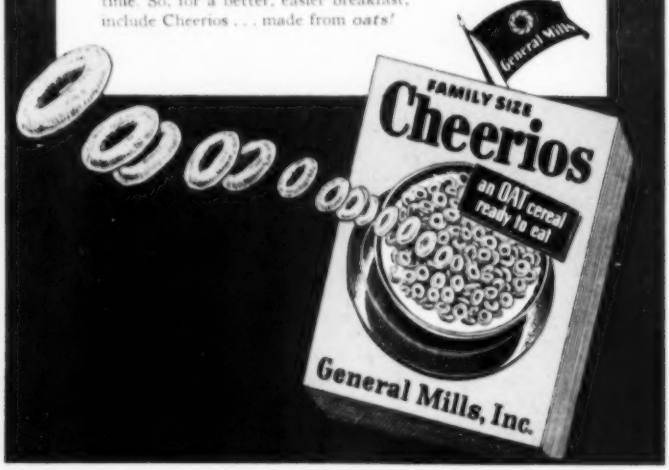
More women use **JERGENS LOTION** than any other hand care in the world!

He's feeling his CHEERIOS...

—THE OAT CEREAL THAT NEEDS NO COOKING!

Yes ... a ready-to-eat OAT CEREAL with a whale of a lot of *GO* power!

Now, try a truly different oat cereal . . . *Cheerios!* Made from energy-packed ***oats***, yet light, crisp, ***ready-to-eat*** . . . actually shaped like golden-brown, appetizing, little doughnuts. Your family will love Cheerios' deliciously fresh, toasted oat flavor. And remember, there's no easier way to serve that hearty oat energy your folks want at breakfast time. So, for a better, easier breakfast, include Cheerios . . . made from *oats!*



Skirts and sweaters

From page 132

Sweaters

Complete instructions for each of these *Successful Farming* designs are available in sizes 12, 14, and 16. (Bust measurements 32, 34, and 36, respectively.) We will be glad to furnish you with patterns. Directions for ordering are printed below.

Skirts

6178. A 28-inch waist size requires 3⅜ yards of 45-inch fabric without nap or 3 yards of 54-inch fabric without nap. In waist sizes 24 to 30. Price, 35 cents.

5932. Size 16 requires 2 yards of 54-inch material (without nap). Pattern also includes a smart waistcoat and tailored blouse. Sizes 12 to 20. Price, 35 cents.

5614. For size 13, you will need 2¼ yards of 54-inch material without nap. Pattern also includes long-sleeved jacket not shown. Sizes 9 to 17. Price, 50 cents.

5452. Teen-age size 14 requires 1¾ yards of 54-inch material (without nap). Becoming blouse and bolero not shown. Teen-age sizes 10 to 16. Price, 25 cents.

To order the Successful Farming *sweater patterns, fill out the handy coupon below and enclose a 3-cent stamp to cover the cost of mailing each pattern ordered.*

The four Advance skirt patterns may be purchased at local stores or ordered directly from us with the coupon.

To: Successful Farming,
4710 Meredith Building,
Des Moines 3, Iowa

We have enclosed cash or money order in the amount of $ ..... for the following patterns: (Send stamps as directed for the purchase of sweater patterns.)

Sweaters:

☐ 7090 ☐ 7089
☐ 7088 ☐ 7087

Skirts:

☐ 6178 Size .....
☐ 5932 Size .....
☐ 5614 Size .....
☐ 5452 Size .....

Name .....

Address .....

City ..... State .....

Made especially to cut away dirt that's packed into floor cracks; caked on to your cement floors; stuck to the stall sides. Long, stiff fibres that give a hard scrubbing action are made from African Bass . . . toughest, longest-wearing of all natural fibres. Sides are specially designed to help you clean out troughs and gutters—easier and faster.

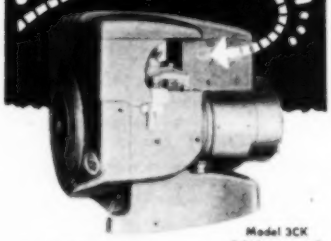
Blocks—2 sizes: 14" and 16". Handles —54" or 60". Next time you're in town, buy Oxco's Civic—moderately priced, at your hardware or dairy equipment supplier and get a cleaner barn floor.

OXCO BRUSHES

OX FIBRE BRUSH COMPANY, INC.
FREDERICK Established 1894 MARYLAND

The Farmer's Trading Center is read by millions. Use it to boost your sales.

When power fails—
or voltage drops—
Just push this button . . .



Model 3CK
3,000 watts, A.C.

. . . on your
ONAN Electric Plant

Insure your electric power supply. An Onan Electric Plant furnishes regular 110-volt electricity for lights, pumps, milkers, oil burner, freeze chest, etc., when storms cut highline power. Easy to install. 1,000 to 55,000 watts, A.C.

Also available: Onan A.C. Generators only (belt up to your tractor for power). 3,000, 5,000, 10,000 watts.

Write for Folder

Onan PRODUCTS
D. W. ONAN & SONS INC.
4998 Univ. SE, Minneapolis 14, Minn.
ELECTRIC PLANTS

See one of these stores for home planning help

Get FREE help in planning your home decorating, building, and remodeling in any of these stores cooperating with the *Successful Farming* Home Planning Service:

Illinois

*Bloomington	Livingston's
Champaign	Robeson's, Inc.
Decatur	Block & Kuhl Co.
*Springfield	John Bressmer Co.

Indiana

*Indianapolis	L. S. Ayres
*South Bend	Robertson Bros.

Iowa

*Cedar Rapids	Smulekoff's
*Davenport	Petersen-Harned-Von Maur
*Des Moines	Younkers
Fairfield	Bradshaw's
Marshalltown	The McGregor Co.
Oskaloosa	The McGregor Co.
*Sioux City	L. S. Martin Co.

Kansas

*Wichita	Hinkel's

Michigan

*Lansing	J. W. Knapp Co.

Minnesota

Mankato	Landkamer Bros. Co.
*Minneapolis	L. S. Donaldson Co.
*St. Paul	Schuneman's

Missouri

*Kansas City	Meiornay's
*St. Louis	Stix, Baer & Fuller
*Springfield	Heer's, Inc.

Nebraska

*Lincoln	Gold & Company
Norfolk	Ballantyne's
*Omaha	Orchard & Wilhelm

New York

*Albany	W. M. Whitney & Co.
*Rochester	McCurdy's
Watertown	Household Merit

Ohio

Ashtabula	Carlisle-Allen Co.
*Columbus	F. & R. Lazarus
*Dayton	The Rike-Kumler Co.
Mansfield	The M. O'Neil Co.
*Springfield	People's Outfitting Co.

Oklahoma

Broken Arrow	Dickason-Goodman
*Enid	Long-Bell Lbr. Co.
*Oklahoma City	Harbour-Longmire
Red Fork	Dickason-Goodman
*Tulsa	Dickason-Goodman

Pennsylvania

*Pittsburgh	Joseph Horne Co.

South Dakota

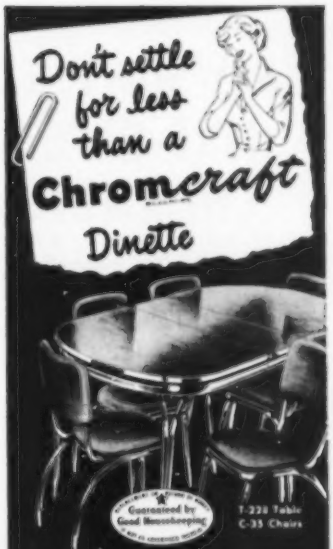
Huron	Fullerton's

Wisconsin

Manitowoc	Boston Store
*Milwaukee	Gimbels

**Stores with home planning specialists.*

Don't settle for less than a
Chromcraft
Dinette



Just one of many beautiful Chromcraft Dinettes . . . in a wide selection of exclusive patterns, designs and colors. Consowald plastic tops that defy burns and stains; Tufflex-cushioned chairs.

Free! Color Panorama Booklet

CHROMcraft Division, Dept. SF 10-2
American Fixture and Manufacturing Co.
4321 Sample Ave., St. Louis 20, Missouri
Send me a free copy of Chromcraft's Color Panorama with advice on blending the right Dinette color with floor, wall and trim.
Name .....
Address .....
City ..... Zone ..... State .....

Enjoy better farm living . . .

. . . by letting *Successful Farming* continue to help you solve all your farm problems.

CLEAR TREES, BRUSH EASIER

SAVE
LABOR
TIME
MONEY

use Johnson Grubbing Tongs

JOHNSON GRUBBING TONGS are the most efficient small land clearing tool ever offered. You will be amazed how quickly and cleanly they clear trees up to 5" diameter and brush from pastures, orchards, fencerows, drainage ditches and stream banks. Everything comes up . . . ROOTS AND ALL! No hand grubbing with pick or mattock necessary. Just hook the TONGS around the base of the growth and pull! The TONGS cannot slip . . . of them. Beats the old log chain method. Heavy steel construction takes any pull. All you need are the TONGS, a chain, and a team of tractor. Recommended by County Agents. Weight 18 lbs. Unconditional Money Back Guar. If your dealer cannot supply you, order direct from us. Send check. M. O. No C.O.D's. Write for folder.

ONLY
$9.35 ea.
Add $1.25 Ship. Chgs. West of Miss. $1.75

RE-BO MFG. CO. 125 MADISON AVE. NEW YORK 17, N.Y.

NEW READY BUILT FIRE-SAFE CHIMNEY

installs easy—costs less

Thousands of VAN-PACKER PACKAGED MASONRY CHIMNEYS Already in Use on Farm Homes and Buildings

Entire chimney is packaged with all parts—nothing else to buy. Even the roof flashing, rain cap and prepared cement for the joints is furnished. Saves up to 50% over brick construction. This is an all-fuel chimney for gas, oil, coal or wood heat. Saves on fuel bills with better draft . . . less soot.

100% FIRE-SAFE —TESTED BY UNDERWRITERS' LABORATORY

Fire-safe because wall is made of insulating vermiculite concrete with a fire-clay liner equal *in insulating value* to 24" of brick or 70" of ordinary concrete. Each Van-Packer section is joined with a permanent bonding acid-proof cement.

You Can Install A Complete Van-Packer Chimney Yourself in About 3 Hours.

Chimney goes up in sections—an average of 5 to each installation. Lightweight—only 1/10th the weight of brick construction. Easy to handle—easy to install. If you need a chimney for your home or one of your farm buildings get free literature by mailing the coupon below.

VAN-PACKER CORPORATION
Dept. 4009, 209 S. LaSalle St., Chicago 4, Ill.

Send the COUPON for Complete Details

Van-Packer Corporation
Dept. 4009
209 S. LaSalle St., Chicago 4, Illinois

Please send me your free folder on the Van-Packer Packaged Chimney and name of nearest Dealer.

Name _____
Address _____
City _____
State _____

Take a person's picture and he is your friend. Francis discovered in Italy. Back home after his six-month visit, he is pictured showing his colored slides to Mother

"I lived with the Communists"

By Francis Pressley
I.F.Y.E. delegate from the United States to Italy

I didn't realize how insidious and powerful communism is until I saw what it is doing to the people of Italy. It was last summer when I left home near Stony Point, North Carolina, to spend six months working and living in the homes of Italian farmers. I was one of the 57 International Farm Youth Exchange delegates who were sent as good-will ambassadors to cooperating countries in the I.F.Y.E. project. We were sponsored by the people back home through the National 4-H Club Foundation, and arrangements were made by the United States Department of Agriculture. Included in this exchange, which was started after the war, are all European countries outside the Iron Curtain, Turkey, Lebanon, Israel, Brazil, and New Zealand.

For the first 10 weeks I lived with two farm families in the rich Po River Valley of north Italy, six weeks on a 1,000-acre farm. The soil in this part of the country is some of the best in all Europe and certainly the most fertile in Italy. Twenty years ago most of the land near the Po was under water, but through government aid and the initiative of a few farm managers such as my host, the land has been reclaimed.

It is almost impossible to raise crops without irrigation there because the climate is very dry. Naturally, the cost of irrigation is high, but the average yields are good. For instance, they grow an average of 100 bushels of corn per acre in the Po Valley. Almost half the land in the "dairying" North is in alfalfa or Ladino clover, and with irrigation they get six or seven cuttings each summer. They also grow rice, wheat, sugar beets, crimson clover, sorghum, tobacco, and hemp. Then, of course, there are all the vineyards; on this particular farm, they made 50,000 gallons of wine each year.

Cows, used for labor as well as meat and milk, are fed the year round because

[*Turn to page 138*

Ask for G-E Motors and Control on all Electrified Farm Equipment you buy!

GENERAL ELECTRIC

FarmNews

Ask for G-E Motors and Control on all Electrified Farm Equipment you buy!

MORE POWER TO THE AMERICAN FARMER through more electricity on the farm

FARMER ELIMINATES A BACK-BREAKING JOB!

One man loads 380 bushels of ear corn per hour with lightweight portable elevator; cuts labor costs

"One of the hardest farm jobs today," says Mr. Lloyd Reiterman of Kingston, Ohio, "is moving bulk materials such as litter, feed or crops from one spot to another. And today it's just about impossible to get people to do that kind of work—at least, not economically."

Licks manpower problem

"But," continues Mr. Reiterman, "I've licked that problem with this lightweight elevator. Just one man can put it wherever it's needed and move crops in and out of bins, cribs and trucks."

Moves 100,000 bushels

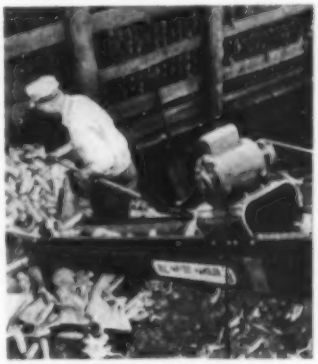
"I've used this elevator since 1950. It's handled at least 100,000 bushels of corn and about 5,000 bushels of wheat during that time—and it has really taken a beating!"

"But I've never had any trouble with it, and I've cut my labor costs to a minimum. Not only that, but my truckman thinks the elevator is great. He says it's a back-saver. Besides getting many times more work done than he could with a scoop-shovel, he doesn't have to work so hard."

Handles many materials

This elevator will handle practically anything that needs to be moved in bulk on the farm.

The one Mr. Reiterman has will move up to 250 bushels of wheat or soybeans per hour, 275 bushels of shelled corn, 680 bushels of oats—at a 35-degree angle. It has paid for itself long ago in labor costs alone.



One man moves 380 bushels of ear corn per hour with lightweight portable elevator.

Uses newly-developed motor

Powered by its extra-lightweight G-E motor (a recent G-E development) and made of aircraft-quality aluminum, the elevator weighs just over 100 pounds. A lighter-weight model, as well as various lengths and modifications are also available. For more information check "Portable Elevator" in coupon.

"MANY TOOLS IN ONE" DOES THIS FARMER'S SHOP WORK

When the company that makes this remarkable machine says "it can build and furnish a house," they have the full, enthusiastic agreement of Mr. William L. Pettit who owns a 400-acre farm in Davis, California.

Mr. Pettit has made all kinds of useful and ornamental articles, from gears and pulleys to lawn decorations.

Complete workshop in one tool

In this one machine, run by a ½-HP lightweight G-E motor, Mr. Pettit has a complete workshop of five basic tools: saw, drill press, lathe, disc sander, horizontal drill—all combined in a precision-engineered, husky, compact unit.

No wonder he, like hundreds of other farmers, thinks it's great! For more information check "Combination Workshop" in coupon.

SOLVES COLD-WEATHER PROBLEMS WITH MOTORIZED HEATER

In cold Houghton, N. Y., Mr. Arthur D. Williams protects his milking parlor from freezing and dampness with two 1500-watt electric milk house heaters.

He also gets comfortable heat at milking time, and the old problem of winter milk house comfort is solved. As Mr. Williams points out, these heaters are necessary when you have a milking parlor—pen stabling set up.

Mr. Williams says these heaters have been in operation for three years and have never failed or given trouble. With their thermostatic control, he sets one temperature for working, another for economical protection against freezing.

A G-E unit bearing motor and G-E Calrod* heater are basic components of this heater. For more information check "Electric Heater" on the coupon.

Electric milk house heater supplies comfortable heat during milking time at Mr. Williams' farm. Safety features permit use of heater even where hay is present.

*Registered Trademark of General Electric Co.

General Electric Company
Section 671-23A, Schenectady 5, N. Y.

I would like additional information on the following equipment.

- ☐ Portable Elevator
- ☐ Electric Heater
- ☐ Combination Workshop
- ☐ "How to Choose Your Motor"

NAME _____

ADDRESS _____

CITY _____ STATE _____

WEAR Friedman-Shelby WORK SHOES

buy two pair at a time

You rotate your crops . . . Why not your shoes?

Crop rotation makes sense. You know that. And rotating work shoes makes sense, too.

If you buy two pair at a time, you'll always have a clean, dry pair to put on the next day . . . giving more comfort and more wear. For two pair rotated will wear more than twice as long.

And when you buy FRIEDMAN-SHELBY Work Shoes, you get many important advantages not found in ordinary work shoes—check the special features of the shoe illustrated.

FRIEDMAN-SHELBY Work Shoes are available in *cowhide* or *horsehide*. You'll find the correct shoe for every work activity—for any climate anywhere.

If you don't know the FRIEDMAN-SHELBY dealer in your neighborhood, please write us for his name and location.

No. 8076-2

Natural retan cowhide; Goodyear Welt; Leather outsole; Rubber heel; Riveted steel arch; Vamp reinforced with nickel rivets; Folded top for comfort; Cookie insole arch support; Barnyard acid-resistant; Sizes up to 14—widths from B to EE, plus H for extra wide feet.

Made by FRIEDMAN-SHELBY DIVISION
INTERNATIONAL SHOE COMPANY • ST. LOUIS 3, MO.

Relieve the *Pressure Pain* of sore, aching muscles!

● Relieve the ache and soreness from overexertion—quickly, easily! Doctors generally will tell you that pain and stiffness may be largely caused by pressure. Sensitive nerves are irritated. Local areas become swollen, sore.

For wonderful relief—*fast*—rub Absorbine Jr. on these stiff, aching spots. It actually helps to *counteract* pressure which may be causing your pain. It warms and soothes. You start feeling better with surprising speed.

Get Absorbine Jr. today. Only $1.25 a bottle at all drug counters.

W. F. Young, Inc., Springfield, Mass.

Guaranteed by Good Housekeeping

ABSORBINE JR.

"I lived with the Communists"

From page 136

they are kept in barns and are never on pasture. The agriculture is so intensified, there isn't room for a "large" pasture.

Practically all the work is done by hand. With 2,000,000 unemployed people in the country, even the wealthy farmer isn't allowed to buy machinery because there is a government law which states that as long as there are so many unemployed people in a certain area, work must be furnished for them. A fortunate farmer will have a clumsy team of white oxen with which most of the work is done. In the mountainous southland they use donkeys as beasts of burden.

Of the 700 people working on this particular farm, 600 were Communists. I think I can understand why. Despite the rich land, the people who work it live as poverty-stricken peasants. Few have more than a meager education; most stop school long before they reach the seventh grade to help make a living for the family (all of them have huge families). These people are more or less isolated and read only the Communist newspapers and listen to their leaders.

It was amazing to hear the false ideas that these leaders give the people about the United States. The greater part of their propaganda is the same old story of Russia's striving for peace and the American aggressors' doing their best to start a war. One day I was riding by the rice paddies on my bicycle and one of the women workers called to me and wanted to know why we were coming back there to start a war. She pleaded with me not to let my government send armies over there and kill her children.

I did everything I knew to try to make these people understand that we want peace just as they do. Despite the government farm-labor law, one farm I stayed on did have a hay baler. I fixed it one day when it broke down—they know so little about the workings of machinery. I think this simple little repair job did more to convince the farmers that Americans are trying to help them than hours of talking.

After 10 weeks in northern Italy I moved to the poverty-stricken South. The Department of Agriculture assigned me to live in homes that were above the average, but I mingled with the poor peasants who do the work during the day. When I arrived at a new farm, I always took time to shake hands with the people and visit with them. They seemed very much surprised, for they have the idea Americans consider themselves superior.

I tried hard to be "just another member of the family" in each home, and the people relaxed and talked freely about their beliefs and problems. The main problem seems to be overpopulation. There are 46,000,000 people in the country, with an area a little larger than Iowa and Illinois combined. Furthermore,

three-fourths of the land is mountainous or hilly and little will grow on it.

In the South, where the farming is very primitive, the farmers use a straight stick for a plow. When it wears out, they cut another stick. This "plow," to which the yoke of white oxen is hitched, hardly turns the soil.

One day when I was touring the countryside on a bicycle, I remember seeing an old man in very ragged clothes using this type of plow. He was holding the plow, a little undernourished boy was leading the oxen, and a woman was walking along beside the plow guiding the oxen. There are thousands of people like these who try to eke out a living. I also saw some old shepherds in the hill country who said that they subsisted entirely on chestnut bread and water during the winter.

Unemployment, overpopulation, lack of education, and poor farming conditions make a fertile ground for communism. The Communists assure these folks that once their government gains control, they will all be given land of their own. They are led to believe that they will no longer be poor. These people are easily swayed. The Communists have festivals in all the towns, and thousands of people flock there for the holiday. I went to one. Communist leaders made speeches from a big platform, and there was much excitement and a great deal of color.

During the entire stay, my hosts were wonderful. They wanted to help me see whatever they had in their country, from agriculture to education and industry. One family took me to the beautiful canal city of Venice where I had the experience of a lifetime riding in "gondolas." Another time, I was guest of a machinery company at the opera *Aida* in Verona, given in an ancient arena. I was taken on tours through Florence, Milan, Naples, and Rome. Florence, rich in art, was one of my favorite places.

All my hosts were fighting communism. They talked very freely with me, as did many other intelligent Italian people. All of them were grateful for the economic aid the United States has given them. But they feel that we should give them military aid as well, not only for their safety but for our own protection.

I believe we are taking the right step when we sponsor such projects as the International Farm Youth Exchange. All the 4-H'ers who have gone to foreign countries have come back with much more understanding for the people, and are eager to tell the people back home about their experiences. We are thrilled when young people's groups ask us to talk to them. If you would like to have an I.F.Y.E. tell about his experiences at one of your group rallies, please get in touch with us through the National 4-H Club headquarters.

I found that in these European countries there are many good people who have much in common with us. They are trying to produce the best from the land and better their living conditions. Most of all, they want to be at peace. **END**

If your car feels like *this*... it's time for
MARFAK Chassis Lubrication

THAT CUSHIONY FEELING LASTS LONGER WITH **MARFAK!**

When Marfak goes on the job, that *cushiony* driving ease stays with you — for 1,000 miles or more! That's because Marfak is made to give your car and truck chassis the kind of protection that lasts under the roughest road conditions. Tough, stretchy Marfak fights jar-out and squeeze-out — clings to points of wear and friction even over rutted, bumpy roads. Ask for Marfak lubrication at your Texaco Dealer, *the best friend your car ever had.*

Play Safe This Winter — Get PT Now!

Before Jack Frost nips your car, truck and tractor, get Texaco PT Anti-Freeze. It's *permanent type* — stays PuT all winter and won't evaporate if a warm spell occurs. PT guards against rust and corrosion. It's anti-foam and anti-boil, too! Get PT Anti-Freeze right now — and you'll be safe when that cold snap comes.

TEXACO

THE TEXAS COMPANY
TEXACO DEALERS IN ALL 48 STATES
Texaco Products are also distributed in Canada and in Latin America

IF PETER PAIN KNOTS YOU UP WITH

Muscle Aches

FOR FAST RELIEF, rub in Ben-Gay. Contains up to 2½ times more of those two famous pain-relieving agents, methyl salicylate and menthol, than five other widely offered rub-ins!

Also for Pain due to COLDS, RHEUMATISM, HEADACHES and STRAINS. Ask for Mild Ben-Gay for Children.

Copyright 1951, by Thos. Leeming & Co., Inc.

QUICK! RUB IN Ben-Gay

THE ORIGINAL BAUME ANALGÉSIQUE

A HEAVY-DUTY UNIT BUILT TO HANDLE YOUR BIGGEST JOBS

HOPTO

DIGGER — SHOVEL — LOADER

USES POWER YOU ALREADY HAVE!

Digs Ditches, Trenches, Ponds . . . Builds Dams . . . Excavates

The power take-off of your standard make tractor powers HOPTO'S heavy-duty hydraulic system! By effortlessly operating the conveniently located controls you can dig drainage ditches, excavate, handle building material, dig footings and foundations . . . hundreds of *profit-producing* jobs around your own place AND profitable custom jobs for your friends and neighbors!

HOPTO is a heavy-duty unit that contractors are using, yet it's the most profitable piece of farm machinery you can buy! One man and the *HOPTO can do more work in a half* a day than one man can do in a week of twelve hour days! Get the facts and you'll approve the purchase of a *proved* HOPTO!

WRITE FOR THIS FREE FOLDER

BADGER MACHINE COMPANY

WINONA, MINNESOTA • DEPT. 7

Livestock

Uses husks for bedding

Husks left after the crib of corn is shelled out are baled for brood-sow bedding by Dean Hirschler, Lee County, Iowa. He likes them much better than the usual oats straw.

Photograph, Wettach

The job was quickly handled by setting a pickup hay baler by the pile of husks and forking them into the machine. They do not mat and absorb moisture, keeping the sows and pigs warmer and drier at farrowing time.—*A. M. W., Iowa.*

Fences pigs away from sows

Keeping pigs away from the sows as much as possible means more live pigs at

Schneider

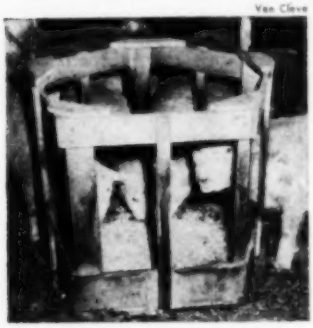
weaning time for Andy Johnston, Buchanan County, Iowa. When the pigs reach 2 weeks of age, he places four sows in a pen. At one end of the pen he fences off a 6'x8' pig creep.

Each creep has two heat lamps suspended from above. These heat lamps attract the pigs, keeping the pigs away from the sow except when they suckle. The pigs are free to go back and forth at will.

Racks pull double duty

The five-sided rack pictured below is used for both hay and grain feeding by Carl Dunbar, McDonough County,

Van Cleve



Illinois. A solid bottom makes grain feeding possible. The rack also has legs so it can be raised as the bedding in the shed increases.—*R. V. C., Illinois.*

Good grass silage valuable

Robert Rice, Calhoun County, Michigan, has quit feeding protein supplements to his dairy cattle. To take up the slack, his cows get two-thirds of their roughage as grass silage and one-third as dry hay. They also get 7 pounds each of ground corn and oats. "Good grass must be put in the silo and at the right moisture content," says Rice, "if you expect it to have high feeding value."

Rice thinks so highly of grass silage that he feeds it to his pigs after they get up to the 100-pound mark. The grain is reduced and they receive all the silage they will eat. He contends that the pigs make cheaper gains and finish out with leaner carcasses.

Best time to feed antibiotics

The best time to feed antibiotics to pigs is between the time they're weaned and 100 pounds, according to research at the University of Illinois. Healthy pigs during this period gain from 10 to 20 percent faster when fed antibiotics, mostly because the pigs eat more feed. Pigs over 100 pounds gain only about 5 percent faster when fed antibiotics.

Tests show that feeding antibiotics to unhealthy pigs during the weaning-to-100-pounds stage may boost their gains as much as 100 percent, due to a decrease in scours, diarrhea, and some forms of enteritis. Adding antibiotics to feed of brood sows between breeding and weaning times does not seem to benefit the baby pigs.—*R. V. C., Illinois.*

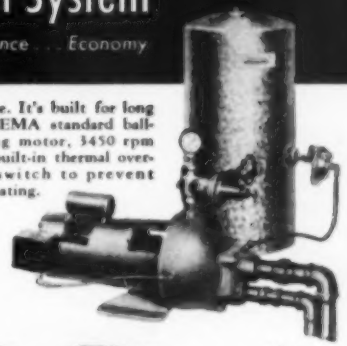
AERMOTOR...The Familiar Name that means *Running Water* to Farmers

Announces a

New CONVERTIBLE JET PUMP Water System

Big in Power . . . Performance . . . Economy

You use the same pump unit, tank, and tank fittings. Your dealer has parts, factory-packaged, for adapting it to either shallow or deep wells. If, for any reason, you wish to change from shallow to deep well operation, you can do it, or your dealer can do it for you. All parts of the Aermotor Convertible Jet Pump are easily accessible for low-cost maintenance. It's built for long life. NEMA standard ball-bearing motor, 3450 rpm with built-in thermal overload switch to prevent overheating.



VERTICAL JET PUMPS

For 2", 3", and 4" wells or larger, with motors ranging from ½ to 1 hp.

SHALLOW WELL PUMP

For suction lift of 22 feet or less. ⅙, ¼, & ½ hp motors for capacities of 250, 350, and 500 gph.

DEEP WELL PUMP

For pumping depths 20 to 750 feet. Available in 4 sizes with ¼ to 3 hp motors. Capacities of 118 to 4950 gph.

AERMOTORS

Wheels 6 feet to 20 feet in diameter. Capacities from 105 to 1100 gph.

SEE THEM AT YOUR DEALERS! Ready, now, for quick installation.

THE AERMOTOR CHICAGO ©

Look for the pumps painted Aermotor Maroon and bearing the Aermotor name on the tank. Compare them and buy the system that meets your requirements.

For latest literature and name of nearby dealer, write

AERMOTOR COMPANY

Dept. 3610, 2500 Roosevelt Road, Chicago 8, Illinois

Factory Branches: Amarillo • Dallas • Oakland • Kansas City • Omaha • Des Moines • Minneapolis

Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 135. Visit store nearest you for help with decorating problems.

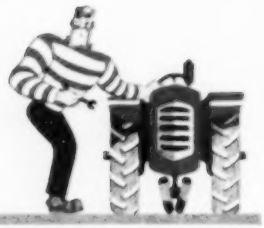
DRIVE-RITE

Adapt-O-Speed P.T.O. Kit

Gives your Ford Tractor the Correct Specified P.T.O. *speed, height & shaft size.* You get: (1) more *power* with correct engine r.p.m., (2) better *work* with implement driven at right speed, (3) more *traction* with drawbar at recommended height, (4) longer *life* with universal joints working in a straight line. DRIVE-RITE makes this possible whether you use a step-up, step-down, or standard transmission. Write for prices, information.

KOSCH MFG. CO., Dept. 55 Columbus, Nebr.

SAVE TRACTOR MONEY!



Save up to 67% of the cost of a complete overhaul by installing new piston rings now!

Thanks to Hastings Chrome Sets, tractor owners are finding it practical (also mighty economical) to re-ring long before a re-sleeving or re-boring operation is necessary.

RE-RING BEFORE RE-SLEEVING!

It's practical because Hastings Chrome Sets give many times the life of plain rings. They provide hundreds of extra hours of peak performance and economical operation. They help prevent oil-pumping—and power lags—between overhauls. Many repairmen and tractor owners report *two* successful Hastings re-ring jobs before re-sleeving.

INSTALL HASTINGS CHROME TRACTOR RINGS!

Don't wait! When your tractor first *begins* to lose power or to use too much oil, install Hastings Chrome Rings right away. You'll keep costs down. You'll keep power up. And you'll keep your tractor going at top efficiency.

(Hastings Rings save money in trucks and passenger cars, too!)

HASTINGS

STEEL-VENT PISTON RINGS

Chrome-Faced for Heavy Duty Service

HASTINGS MANUFACTURING COMPANY, HASTINGS, MICHIGAN
HASTINGS LTD., TORONTO
Piston Rings, Spark Plugs, Oil Filters, Casite, Drout

October

Poultry

Atomized Newcastle vaccines

Veterinarians are now effectively using atomized vaccines to prevent losses from deadly Newcastle disease in poultry, according to Drs. S. B. Hitchner and G. Reising of the Massachusetts Agricultural Experiment Station. Reporting on their experiments with the B₁ strain of virus for Newcastle vaccination, the two researchers said the best protection seems to come when the vaccine is reduced to an atomized state.

Atomizing the vaccine is done by diluting it with glycerin and subjecting it to blasts of compressed air which break up the vaccine into tiny particles. It is blown into the poultry house, where the birds breathe it, developing immunity against Newcastle disease.

The Massachusetts veterinarians have tested the new method in both the laboratory and field. "These tests have demonstrated that atomization of the B₁ strain of virus offers a practical method for vaccination and revaccination of birds 3 weeks of age or older," researchers said.

How much to raise a pullet?

Each pullet going into your laying house represents a sizable investment which must be paid off during the laying year. These figures from the Cornell Experiment Station give you some idea of these costs. Figures include all expense items—feed, labor, and chick costs.

	Leghorns		Heavy breeds	
	All costs	*Feed only*	*All costs*	*Feed only*
1949	$1.93	$ .96	$2.19	$1.30
1950	1.90	.95	2.13	1.29
1951	2.12	1.09	2.39	1.48
1952*	2.22	1.12	2.47	1.53

*1952 is estimated.

All mites aren't bad

Some poultry mites found in the hen house are not harmful, says Dr. E. N. Moore of the poultry science department, Ohio Agricultural Experiment Station. Most common of harmless types is the litter mite. These often are found in old, built-up litter in such great numbers that the litter seems alive with them.

Moore learned that such mites belong to the same group as the mushroom or cheese mite and are not poultry parasites. No one knows what part they may play in the function of built-up litter, but they are not a problem for poultrymen.

Identification of these mites was confirmed by the Bureau of Entomology and Plant Quarantine, United States Department of Agriculture, after preliminary investigation by the poultry science department at Wooster.

pointers

However, red mites are harmful to broilers or laying flocks. Gray in color, except when filled with the hen's blood, they make their home in cracks in the roosts or walls during the daytime. At night they attack the birds and lay eggs.

A commonly used antilouse preparation is lindane, applied as a spray or dust. It is better than other types such as nicotine sulfate, as it clings to walls and roosts, remaining effective for several days.

Cutting down leukosis losses

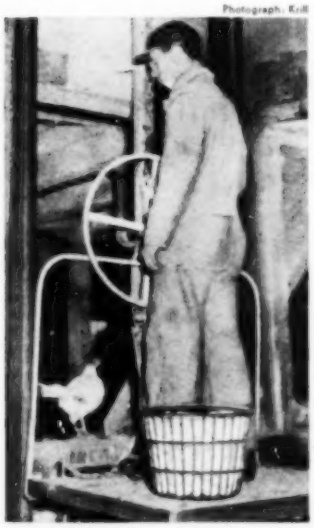
Preventing severe losses from leukosis, a cancerlike disease in poultry flocks, depends largely on proper flock management. No effective cure for the disease has been found so far.

Dr. L. E. Hanson, Illinois College of Veterinary Medicine, points out that range paralysis and big-liver disease, two forms of leukosis, may strike from 3 to 4 percent to nearly all of the birds in a flock. Range paralysis strikes chiefly pullets on range, while big-liver disease attacks laying flocks.

Doctor Hanson says young birds should be kept separate from old stock, as chickens appear to be most susceptible during their first 30 days. Gradually, chickens increase their resistance to the disease. Symptoms of leukosis may appear 6 weeks to a year after the birds are infected.

Good sanitation also helps, including thoroughly cleaning quarters and equipment and rotating ranges regularly.

Photograph: Krill



Small elevator saves space in poultry house for Kenneth Garver, North Lima, Ohio, by eliminating stairs. Lift works on a chain and sprocket powered by a handwheel

An effective once-a-day treatment against

SHIPPING FEVER • FOOT ROT • CALF DIPHTHERIA
ACUTE MASTITIS • METRITIS • CALF SCOURS
BACILLARY ENTERITIS
OTHER BACTERIAL DISEASES and COCCIDIOSIS

Prompt treatment of sick animals and the rapid action of SULMET Sulfamethazine *Lederle* in combating diseases make a combination that *saves animals, reduces sickness disability, holds down losses* in weight and stunting.

A single treatment of SULMET, given promptly, may be sufficient to knock out bacterial infections and bring sick animals back to normal feeding. This means less time is spent treating sick animals!

SULMET is also effective against many common diseases of horses, swine and sheep.

Time-proven SULMET Sulfamethazine *Lederle* is available in 6 dosage forms: POWDER, TABLETS, OBLETS*, TINTED EMULSION (for pink eye bacterial infections), SOLUTION 12.5% (for use as a drench, if desired), and INJECTABLE SOLUTION (by, or on the prescription of, a veterinarian).

Your veterinarian is your dependable ally in the constant war against disease. Consult him for the most effective management practices and disease-control procedures to meet your individual needs.

Free literature gladly sent upon request.

*Reg. U. S. Pat. Off.

Animal Industry Section

LEDERLE LABORATORIES DIVISION

30 Rockefeller Plaza AMERICAN Cyanamid COMPANY New York 20, N. Y.

Science in the Barnyard

By DR. HESS

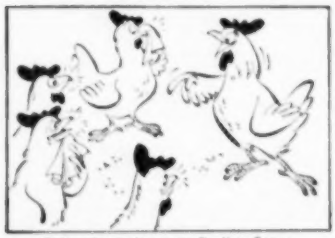
Be sure laying houses are properly ventilated before you bring in pullets. For coryza (the common cold) thrives among chickens housed in damp, drafty quarters . . . causing laying slumps, death losses, and worthless culls. But even the best ventilation won't stop occasional outbreaks of coryza. That's why more and more poultrymen call for Dr. Hess Coryza Tablets. Used in drinking water, this Dr. Hess sulfathiazole product keeps coryza well in hand. *Write for free plans on Poultry House Ventilation.*

Over 5 years ago our research men first worked with nitro-furz-zone for "coxy" of chicks. It was soon found to be active against Salmonella organisms, which naturally raised the question . . . "How about nitro-furz-zone for necro (caused by Salmonella) of swine?" More than 2 years of research with hundreds of pigs proved it both effective and economical. So, we now offer you Necrono . . . a new Dr. Hess product that's easily used to prevent costly pig losses. Ask your Dr. Hess dealer. *Or write us for new Necrono folder.*

Getting back to the subject of readying laying houses . . . getting rid of mites is mighty important too. Otherwise, these pests often get so bad they kill roosting birds! Mites multiply extra-fast during the dog days and through early fall. They die fast though, once you use Dr. Hess Dip and Disinfectant. That also holds good for any germs that lurk in the poultry house. Just clean it well, then spray with Dip. Get this all-purpose disinfectant from your Dr. Hess dealer.

Worms "come of age" lots quicker in hot weather—and pastured sheep usually pick up lots more of them. Sheep specialists advise keeping a phenothiazine-salt mixture in self-feeders. This kills worm eggs in the manure and prevents re-infestation of grazing animals. Dr. Hess PTZ Pasture Mix does this job . . . and more. Besides the worm-control and salt, it provides essential minerals lacking in dry or woody grasses. *Ask for informative folder on PTZ For Worm Control.*

DR. HESS & CLARK, INC.
Ashland, Ohio
Scientific Farm-aceuticals Since 1893



Girls, why don't you try Dr. Hess Coryza Tablets? They knocked my cold in a hurry!

Turkeys and dairying

Cows provide Kehl a steady monthly income—the turkey income is seasonal

By Earl Seidlinger

Most dairy farmers have a side line. Some go in for chickens, others for hogs or sheep. Clarence Kehl, Columbus, Wisconsin, raises turkeys. Back in 1935 Kehl switched to turkeys because he felt chickens didn't pay off as they should. Today the profit from his 3,000 turkeys competes with that from his dairy herd.

Turkeys and dairy cows complement each other, says Kehl. The cows take care of the grass and provide a steady monthly income. The turkeys give him a seasonal income and help stretch the feed supply.

Back in 1942 he couldn't buy enough turkey poults, so he bought a 10,000-egg incubator and started his own hatchery. Now he carries over 700 birds a year as breeding stock, sells 15,000 poults, and raises 3,000 himself.

He caters to small turkey raisers—those raising 1,500 or less. His present hatchery is geared to turn out 1,000 poults every 5 days. If buyers live within 100 miles of his farm, he will deliver the poults personally and give the purchaser tips on how to raise them. Or, the buyer may call for them himself and save the transportation cost and get the same tips.

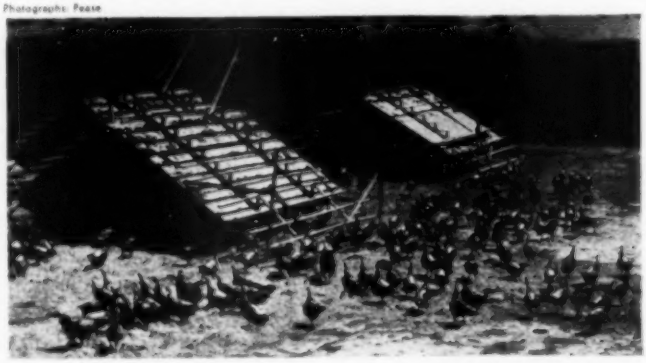
"Most turkey raisers will range their birds," says Kehl, "but I find it doesn't pay. My 3,000 turkeys require 20 acres of range. On 20 acres I can raise a lot of corn and oats. Besides, turkeys will ruin any good legume in the fall by clipping it too short."

Instead of ranging, he built a 100x150-foot concrete platform at the rear of his dairy barn and fences his turkeys there. The concrete keeps them out of the mud and also aids in health maintenance. Because the turkeys are enclosed and away from range grasses, he supplements their diet with a good grass silage—a combination of alfalfa, brome, and Ladino clover.

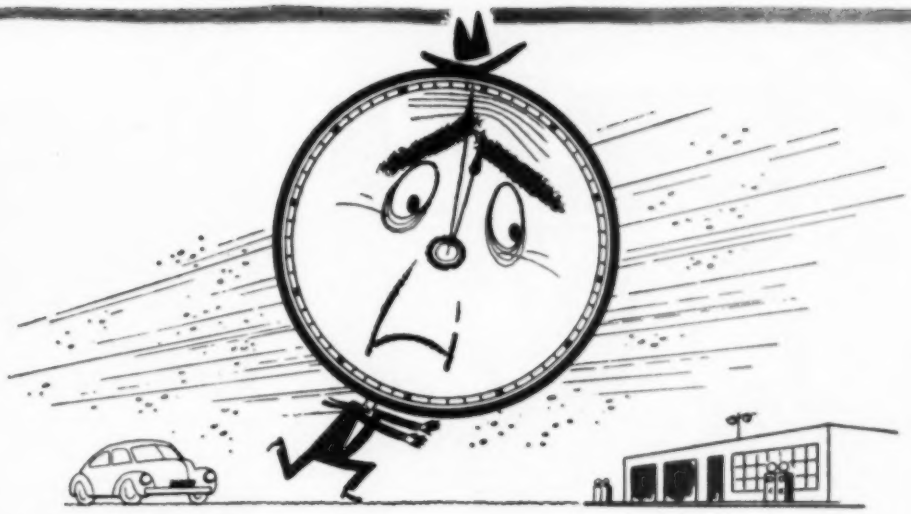
The birds are brought into early production by the use of artificial light. A time clock turns on overhead lights to

[*Turn to page 146*

Photographs: Pease



Concrete platform takes place of range. Platform keeps turkeys out of mud, aids in maintaining health. Grass silage (see above) is fed in ration to take the place of grass



Don't be a last minute man!

PROTECT YOUR CAR NOW WITH PEAK' ANTI-FREEZE

Why run the risk of an unexpected cold wave that may freeze-up your car's radiator or engine? Drive in early and let your serviceman clean the cooling system and put it in tip-top shape. Then, get Peak . . . the all-winter, all-weather anti-freeze. One filling is all you need for complete winter protection. Peak saves you the fuss and bother of check-ups after every warm spell . . . it won't evaporate or boil away even on the warmest day. What's more, Peak's *exclusive* anti-rust combination keeps the cooling system clean all winter . . . prevents corrosion and rust-clogged radiators. Beat the last minute rush—drive in and ask for Peak today.

PEAK ANTI-FREEZE *is a product of Commercial Solvents Corp.*

LOOK FOR THE BLUE AND SILVER CAN

$3.75 GALLON

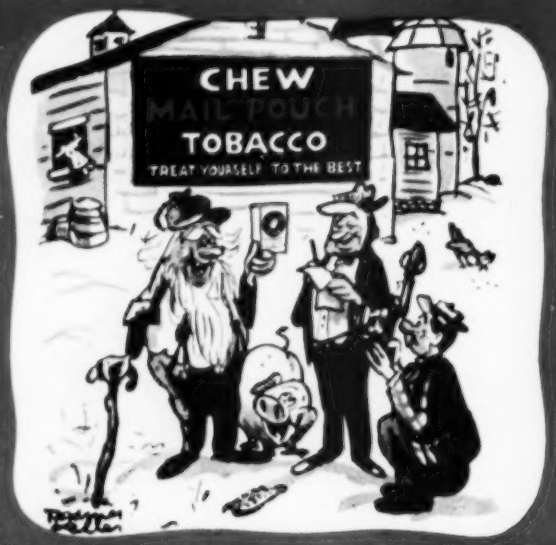
Freeze? FORGET IT!

Boilaway? NOT A CHANCE!

Rust? NEVER! NEVER!

ONE FILLING IS ALL YOU NEED

PEAK . . . THE ALL-WINTER . . . ALL-WEATHER ANTI-FREEZE



"Yep, I'm a hundred years old today—and my advice is to treat yourself to the best."

MAIL POUCH quality is in the tobacco. It isn't overloaded with sugary sweetness that tires your taste. That's why Mail Pouch Tobacco tastes better—lasts longer.

there is no substitute for the quality and protection offered by the Genuine

Heat-Houser

CHECK THESE FEATURES:

- One piece heavy duty waterproofed canvas.
- Side Aings and Windshields are standard equipment.
- Simple installation on Best rup. Large Standard, Small Standard and Track Type Tractors.
- PROTECTION FOR YOU AND YOUR TRACTOR.
- SEE YOUR DEALER OR WRITE FOR COMPLETE FREE DETAILS.

The Genuine HEAT HOUSER IS SOLD BY BETTER DEALERS FROM COAST TO COAST

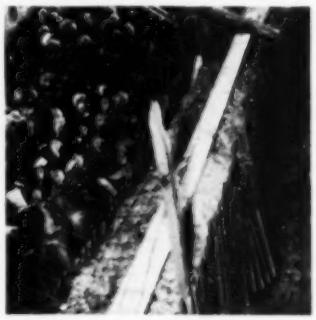
SEND FOR FREE FOLDERS
NAME
ADDRESS
CITY STATE

FORT DODGE TENT & AWNING CO.
FORT DODGE, IOWA

Turkeys and dairying

From page 141

Poults are started on 4-inch layer of peat—more is added later. Barrier keeps young birds close to the oil-heating stove



Straw bales, stacked three high, segregate toms from hens—keep hens quieter. Fencing keeps birds from ruining bales

lengthen the daylight artificially to 14 hours. The toms get the light treatment 10 days earlier than the hens. To do this he separates the hens from the toms in pens on his concrete platform.

To produce fertile eggs (his average hatch runs about 85 percent), he changes toms every day. Changing toms is accomplished in a unique way. In the morning following their day with the hens, they are chased into a pen at one end of the concrete yard. Once there they make a dive for the feedbins because most of them haven't eaten for the previous 24 hours. Once they are penned, a fresh batch of toms is let in with the hens.

The tom pens are segregated from the hens by bales of straw piled three high. This keeps the toms from seeing the hens and keeps the hens quieter. Twenty fresh toms are run in with 640 hens every day.

On the concrete platform are six range houses. The range houses were used when he still ranged his birds. During the breeding season, the houses provide nesting places and contain the feeders.

The poults are sent out when a day old, a condition made possible by having enough advance orders. "Contrary to common belief, turkeys aren't sensitive when young," Kehl explained. "If they are healthy and get proper feed and care, they will be no problem to raise."

Special trailer is used to take young turkeys from brooder house to concrete platform, also used in processing season

The 3,000 poults Kehl raises are put into a brooder house. A fresh 4-inch layer of peat is on the floor to keep the moisture down. Three weeks later another inch of peat is added. In successive weeks, more peat or ground corncobs are added.

By this time the birds are growing rapidly and straw bedding is substituted. When the turkeys are turned into the pens around the brooder house, straw is placed there, too. Not until the turkeys are placed on the concrete platform is the litter cleaned out and spread on the land.

Kehl feeds special starting mashes with antibiotics mixed in rather than compounding his own feeds. "Perhaps it would be cheaper to mix my own feeds," he says, "but why experiment? I'm not running an experimental farm. When I buy a reliable feed I know it's good."

When his turkeys are 14 weeks old, they are transferred to the concrete yard. The turkeys are kept here until time for them to go to market.

The turkeys are debeaked when they are 18 to 20 weeks old. The upper bill is electrically cut off so it is slightly shorter than the lower. This prevents fighting and scarring the flesh.

As each bird must be handled for this process, Kehl gets a chance to select next year's breeding stock. He daubs their necks with yellow paint and turns them loose with the others.

Those not saved for breeding stock get an injection of two 15-milligram stilbestrol pellets in the upper neck. This hormone produces a better fat covering and has a tenderizing effect on the meat.

The hens are sold at 6 months of age, weighing 15 pounds. At 7 months the toms are sold, weighing 25 to 30 pounds. Four to 5 pounds of feed go into every pound of live weight. When gaining well, they will consume from $\frac{3}{4}$ to 1 pound of feed daily.

A fair average net return at present prices is about $2.50 per bird, not counting his own labor.

Kehl does his own processing. Most of his turkeys are sold in larger markets at Chicago and Milwaukee, but he also has built up a local trade of 700 birds. Customers can have turkeys any way they wish—alive, picked, or oven-ready. **END**

"We're starting him off on the right footwear!"

"For generations our family has been wearing Weatherproofs with that Red Ball trade-mark. We know from experience we're sure of getting honest value, good fit and good wear for the rugged service we need on the farm. The first pair of boots I ever bought had the Red Ball trade-mark. That's why I'm starting him off on the right footwear."

ARCTICS
4 and 5 buckle heights. Securely anchored buckles, sturdy soles, correct fit for longer wear.

WORK RUBBERS
Liqua-Flex construction. Sealed in liquid rubber. Extra flexible—extra light.

LOOKING FOR GOOD FOOTWEAR? LOOK FOR THE **RED BALL**

Weatherproofs by
BALL-BAND
MISHAWAKA, INDIANA
RESPECTED FOR QUALITY SINCE 1891

TRADE MARK

"OVERNIGHT IMPROVEMENT WITH TRIBIOTIC*"

NORMAL, ILL. — Floyd Mohr, who wins prizes with his Guernseys, raises 50 milk cows on his 200 acre farm here. He has been using various treatments to help control mastitis infections.

Recently, however, Floyd had a couple of extra tough mastitis cases that just refused to respond to usual treatment methods. He had heard about Wyeth's new Tribiotic Ointment and decided to give it a try. Here's what he says:

"One of these cows had a badly infected teat and I used one tube of Tribiotic. Next morning the improvement was so great I used no further treatment. The other tough case, was a cow giving bloody milk and I treated her with two tubes of Tribiotic ... there's been no trace of mastitis in the four weeks since she received this treatment.

"The ointment is sure easy to use with its convenient one-pinch tube."

*Trademark

TRIBIOTIC
NEWEST MASTITIS CONTROL PRODUCT

- **TRIBIOTIC OINTMENT** triple antibiotic combination, provides multiple striking power and gives a wider range of effectiveness and increased action. Supplied in one pinch single dose tubes.
- Each handy tube of Tribiotic Ointment contains 100,000 units of penicillin together with the equivalent of 50 mg. dihydrostreptomycin base and 5,000 units of bacitracin.

CONSULT YOUR VETERINARIAN AS YOU WOULD YOUR PHYSICIAN

Wyeth
Incorporated,
Philadelphia 2, Pa.

Wyeth

8

Livestock minerals

From page 46

is needed to form hydrochloric acid secreted by the stomach for digestive purposes. Whatever the functions, it is known that without salt the animal eventually fails in health and in production.

After several months without salt, cattle lose weight, decrease in milk production, develop abnormal heartbeats, and eventually die.

When salt is provided free-choice to animals, they can eat what they want and it's usually assumed that they will eat what they need. Under this condition, cattle will consume, on the average, some 1 to 4 ounces per head per day. Sheep will eat $\frac{1}{4}$ to $\frac{1}{2}$ ounce daily, pigs up to $\frac{1}{3}$ ounce per day, and horses 1 to 2 ounces a day.

Calcium and phosphorus

So far as the mineral elements calcium and phosphorus are concerned, farm animals differ as to which element is more likely to be lacking in ordinary rations. Roughages, especially those containing legumes, contain *fair to rich* amounts of calcium. But roughages contain only *fair to poor* amounts of phosphorus.

On the other hand, the grains and their mill-feed by-products contain, in general, *poor* amounts of calcium but *fair to rich* amounts of phosphorus. On this basis, cattle, sheep, and horses are more likely to be deficient in phosphorus. The heavy grain consumers—swine and poultry—are more likely to be deficient in calcium.

Calcium and phosphorus must be discussed together, since they travel as a team through many of the body structures and functions. In addition to this, both are closely related to vitamin D, which is necessary to permit the proper use of both calcium and phosphorus.

Some 99 percent of the calcium and 75 percent of the phosphorus of the animal body is located in the bones and teeth. So, shortages of these elements will in some way affect the development of these two body parts.

The periods of highest calcium and phosphorus needs occur during rapid bone development. These periods are during the growing term or during pregnancy when the skeleton of the fetus is forming. Milk production is a period of high calcium and phosphorus need, also, since milk is rich in both.

A lack of either calcium or phosphorus—or vitamin D—in the young, growing animal will result in soft, crooked bones, enlarged joints, and abnormal teeth. This condition is called rickets.

A lack of calcium or phosphorus in mature animals does not affect the skeleton so severely as in young animals. But a lack of either of these minerals leaves its impression in fragile bones, in an abnormal appetite, and a decrease in weight and milk production.

For calcium, the legume forages are excellent sources, as are such animal products as tankage, meat scraps, fish meal, and milk by-products. Recent analyses of various grasses have indicated that while they cannot be considered rich in calcium, they contain enough calcium for farm animals not being forced for very high production. And grass is one feed most farmers have these days.

Excellent sources of phosphorus are to be found in various mill feeds such as wheat bran, wheat middlings, and the various oil meals. Also, animal by-products such as tankage, meat scraps, fish meal, blood meal, milk, and its by-products are good sources. Supplying adequate phosphorus is perhaps most difficult in the case of cattle and sheep that are being fed largely on roughages because this type of feed is low in phosphorus.

Phosphorus can be fed as a supplement—bonemeal, dicalcium phosphate, or defluorinated rock phosphate. (Never feed fertilizer superphosphate.) Ordinarily this can be done by adding one of the above supplements to the concentrate mixture—20 pounds per ton of feed. Or, you can feed the animal mineral supplement free-choice in a box, in which case the animal's appetite determines the intake.

So much for the common minerals. Now, let's look at the need for trace minerals in livestock feeding.

The trace minerals include iodine, copper, cobalt, manganese, iron, and zinc. Zinc has not yet been shown to be needed by any farm animal. Furthermore, feeds in general contain an abundance of zinc, so we won't discuss it further in this article. Iron, while not strictly a trace mineral, is conveniently discussed here since it is closely associated with copper in its uses in the body.

Iron

Iron is a structural unit of the red coloring matter of the blood, called hemoglobin. This red pigment transports oxygen from the lungs to all cells of the body for their use. It is evident that without adequate supplies of iron there will be a deficiency of hemoglobin, a condition commonly called anemia. Here, the oxygen transport in the body is reduced. This condition leads to difficult breathing, shortness of breath, and a lack of pep. Anemic young pigs breathe so hard that it can be heard, so we use the common name "thumps."

Under most conditions, farm animals get all the iron they need from any ordinary combination of feeds. Soil is also rich in iron, and swine can make excellent use of it.

Milk is very low in iron as well as copper. Animals fed exclusively for any length of time on milk alone are apt to become anemic due to a lack of both iron and copper. Among farm animals this is usually a problem only with suckling pigs raised indoors and on paved floors where they do not have access to soil. In such cases the young pigs should be given additional iron.

Giving additional iron to pigs can be

[*Turn to page 130*

Horsefeathers!

Don't Let Anyone Kid You About Shell Horsehide Leather—
THERE'S A HEAP OF DIFFERENCE!
IMITATIONS? PLENTY!—DUPLICATES? NONE!

No Other Work Shoe Leather In The World Tanned Like

WOLVERINE

Shell HORSEHIDE *It's Triple-Tanned*

THE BONUS of wear AND comfort is YOURS in Wolverine SHELL Horsehides! Call it magic, or any other term you wish—the fact is that Wolverine and ONLY Wolverine tans this super-tough three-ply work shoe leather to amazing softness with ALL its super-wear tanned in, by an exclusive tanning formula known ONLY to Wolverine! Because of this, millions of work shoe wearers get more miles of wear, more days of comfort, per-dime of cost, in genuine Wolverine Shell Horsehides. Visit your dealer and get the facts!

WOLVERINE SHOE & TANNING CORP.
ROCKFORD, MICHIGAN

See That Shell

The shell is the center layer. It is a tough substance much like your thumb nail or a cow's horn. Shell horsehide is actually a three-ply hide and is found only in hide from directly over the horses' hips.

In shell horsehide, the fibers are vertical. The wear is on the END, like the wear-resisting wood in a butcher's meat block. Ordinary work shoe leather has horizontal fibers that wear on the side . . . wear through much quicker.

Wolverine's secret tanning process, known only to Wolverine, tans this shell section buckskin-soft, yet retains ALL its great strength and wear.

New Wolverine PIGSKIN

Wolverine's Amazing New Miracle Work Shoe Leather! Triple-tanned! Light, comfortable! Extra Long Wear. Economical, too! Ask Your Dealer!

Extra Wear.. Extra Comfort! In Every Pair!

FREE

Wolverine Leather Laces

A pair of tough 36-inch Indian Tan Leather Laces is yours FREE of cost just for asking where you can buy WOLVERINES. Send *No* Money . . . just mail the coupon.

WOLVERINE—Dept. UC-10—ROCKFORD, MICH.

Rush me name of nearest Wolverine dealer PLUS a pair of Indian Tan Leather Laces *FREE OF ALL COST.*

Name _____

Address _____

Town _____ State _____

WHO will own your farm...

when YOU aren't in the picture?

You want your family to own it, of course! HAVE YOU MADE SURE?

Estate taxes, inheritance taxes, and administration costs may add up to as much as 20 to 30 per cent of the value of the estate. These costs must be paid within a short time—IN CASH. Will your family have that cash readily available?

Your Woodmen Central agent can help you—and your family.

- Woodmen Central's Clean-Up Plan will provide the means to pay those costs that might otherwise force your farm on the auction block.
- Woodmen Central's Mortgage Cancellation Plan will pay any mortgaged indebtedness on your farm.

INVESTIGATE NOW

See your local Woodmen Agent for details of these plans. He also will be glad to explain the many other forms of Woodmen protection—Life, Accident, Health, Hospitalization and Group. Or write to . . .

WOODMEN
ACCIDENT COMPANY
CENTRAL LIFE INSURANCE CO.
CENTRAL ASSURANCE CO.
Old Line Legal Reserve Companies
Since 1890
LINCOLN, NEBRASKA

Livestock minerals

From page 148

done several ways. Painting the udder of the sow with a saturated solution of copperas (iron sulfate) is one method. You can also place a piece of parasite-free sod in the pens for the young pigs. It does no good to feed additional iron to the sow, *for very little of the iron passes into the milk.*

For all other farm animals, *there is no valid evidence that any ordinary combination of feeds is deficient in iron.*

Iodine

Iodine is needed by the thyroid gland located in the neck, to manufacture the hormone thyroxine. This hormone regulates the rate of body metabolism. With a high production of thyroxine the body "burns the candle at both ends." The low production of this hormone causes the body processes to slow down and the individual becomes lazy and tends to lay on fat.

With inadequate consumption of iodine, the thyroid gland attempts to compensate for the shortage and becomes visibly enlarged. This condition is commonly called goiter. Another prominent sign of iodine deficiency in farm animals is the birth of dead or very weak young who may have a sparse coat of hair or wool.

In this country there is a large area of iodine deficiency of the soil and water over the approximate northern half of the states. This division extends from the West Coast to as far east as New York State. The use of an iodine supplement such as iodized salt is *strongly recommended in this large area.* The time of greatest iodine need for farm animals is during the last half of pregnancy.

There is no advantage in feeding farm animals more iodine than is found in iodized salt. In fact, liberal iodine feeding should be discouraged. Iodine is poisonous when fed at levels higher than what are nutritionally required.

Copper

We mentioned that copper cooperates with iron in permitting the body to form its needed hemoglobin in the blood. Thus, a shortage of copper will also cause anemia.

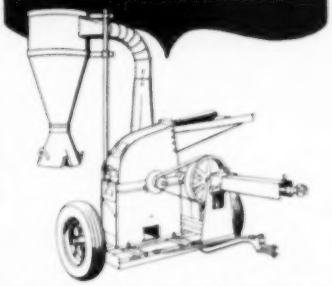
In addition, copper deficiency affects many other parts of the animal body. For example, in sheep there occurs a degeneration of the brain and the animal cannot walk properly. This has led to the descriptive name, "swayback." Also, wool loses its crimp and becomes straight.

In cattle, a lack of copper results in a degeneration of the heart muscles and the animal may suddenly fall over and die. Because of this the disease in cattle is termed "falling disease."

So far as livestock in this country are concerned, copper is normally present in adequate amounts in ordinary feeds, except in certain areas of Florida.

Recently, copper supplies in forage have been shown to be affected by the

FAIRBANKS-MORSE
PTO RIG
Speeds Feed Grinding



It is easier, cheaper and faster to take your hammer mill to the grain than to take the grain to your mill!

You can haul your grain from the field to feeding bunkers or outlying granaries, eliminating one extra trip. Or, you can follow the harvesters with your mill mounted on the Fairbanks-Morse PTO Rig and grind at once.

Fairbanks-Morse PTO Rig will mount *any* hammer mill. Because the mill is driven by short length transmission belts, the old style long tractor belts usually used are no longer needed. Thus, no time is wasted lining up mill and tractor, or in staking the mill down.

This PTO Rig is ideal for the farmer who uses his mill to do custom grinding for his neighbors.

See this PTO Rig at your Fairbanks-Morse dealer's store. If you do not know the location of your nearest dealer, write Fairbanks, Morse & Co., Chicago 5, Ill.

FAIRBANKS-MORSE
a name worth remembering when you want the best

HAMMER MILLS • HOME WATER SERVICE AND LAUNDRY EQUIPMENT • ENGINES • GENERATING SETS • MAGNETOS • MOTORS • MOWERS • PUMPS • SCALES

You get more for your classified advertising dollar in Successful Farming. It's better read by better farm customers. Details on request.

TOPS IN SERVICE...ECONOMY AND EASE OF OPERATION

THE **HUMBOLDT LOADER**
The Lowest Priced QUALITY LOADER on the Market

A NATIONWIDE FAVORITE

The Humboldt can't be beat for rugged dependability, trouble-free operation and labor-saving economy.

Full Line of Attachments

The HUMBOLDT LOADER is EASY to INSTALL . . . EASY to OPERATE. Readily gets the loads up, out and over. Has powerful twin hydraulic high pressure cylinders. No cables, no sheaving, nothing above the tractor. Guaranteed workmanship and materials. See your dealer or write for new FREE literature and low prices.

Silbaugh MFG. CO.
Humboldt, Iowa

"You can trap for profits... I did and made $800.00!"

says George Dana of Pembroke, Maine: "Trapping brought me $800.00. Besides paying a good many living expenses, I bought more trapping supplies—even bought a canoe!"

V. E. Lynch, Sarcoxie, Missouri, tells us: "Trapping mink, coon and fox with Victor traps brought me $500.00 last year."

Jerry Ditchfield, Farmington, Michigan, writes: "I followed the example of wise woodsmen and used Victor traps. The muskrat, mink, coon and fox I caught made $325.00 for me."

Henry Boettger, St. Croix Falls, Wisconsin, writes: "I made $360.00 trapping—enough to buy clothing and more Victor traps and equipment. Victor traps are the best there are."

Harry E. Higbee, Grove City, Pennsylvania, says: "My profits from trapping fox and mink totaled $640.00 last year."

You can make extra money, too. Do as these trappers did—make sure of your fur catch by using Victor Traps—look for the "V" on the pan.

No. 2 Victor Coil Spring

Animal Trap Co. of America
Dept. 304, Lititz, Pa.

Victor TRAPS
Mean Money for You!

HELPFUL SUGGESTIONS for solving all types of farm problems are found in each issue of *Successful Farming*.

WORM ME -please!

When chickens become boarding houses for worms something must be done fast. In 72 hours or less, Dr. Hess Nicozine can rid your flock of both cecal worms and large roundworms, at 1¢ per bird or less. Doesn't hurt the birds or cause a laying slump. Works on turkeys, too! Use Nicozine Powder for flock treatment, or Tabs to treat birds individually. Dr. Hess & Clark, Inc., Ashland, Ohio.

Write for free bulletin.

Dr. HESS NICOZINE

Scientific Farm-Aceuticals Since 1893

content of large amounts of another mineral element, molybdenum. Molybdenum is not needed by animals. The presence of large amounts of molybdenum renders the copper in plants nonavailable to animals. The animals then show signs of copper deficiency and respond favorably to drenching with small amounts—approximately 0.1 ounce per day—of copper sulfate.

Cattle are particularly affected by a shortage of copper. They may develop a severe frothy diarrhea, lose weight, and the hair of black cattle may turn gray. Such molybdenum-toxic areas have been spotted in Florida and California and may exist in other states.

Livestock in copper-deficient areas or in areas of high molybdenum content may require copper feeding in addition to that found in ordinary rations. This can be done in several ways. One of the best is to add copper sulfate either to salt or to a *simple* mineral mixture and allow animals to consume it free-choice in a mineral box.

The amount of copper sulfate to add is a question. Recommendations range from 1 ounce to 1 pound per 100 pounds of salt or mineral mixture. A warning here is necessary, for copper sulfate is also poisonous and stock have been killed by the feeding of salt mixtures containing 4 percent or more of copper sulfate.

Cobalt

Cobalt is a term only recently incorporated into the lingo of the livestock feeder. The extremely small amount required by ruminant animals borders on the spectacular.

If a penny were pure cobalt, there would be enough adequately to supply more than 30,000 sheep or 6,000 cattle with their daily cobalt requirements. Amazing as it might seem, there are conditions under which ordinary feeds do not supply this small amount and cattle and sheep suffer as a result.

This deficiency in feed occurs in so-called cobalt-deficient areas in which the soil is low in available cobalt and the plants grown on these soils lack adequate amounts. Such areas are now well established in Florida, New Hampshire, Michigan, Wisconsin, New York, and North Carolina.

Present evidence is that cobalt is required only by ruminants. In ruminants, the deficiency sign is extreme loss of appetite. From this, it follows that the animal deficient in cobalt will lose weight and in the case of dairy cows, fall off in milk production.

A shortage of cobalt may also cause an anemia evident in the living animal by a paling of the membranes around the eyes and mouth. Cobalt-deficient animals respond favorably and quickly when fed cobalt salts.

Mixing 2 grams—approximately 0.1 ounce—of cobalt salts per ton of grain will adequately take care of livestock. If it is more convenient to feed cobalt salts in a simple mineral mixture, then approximately $\frac{1}{2}$ ounce per 100 pounds of min-

[*Turn to page 152*

TREAT MASTITIS WITH PENDISTRIN®
SQUIBB

For THOROUGH PENETRATION
Prolonged EFFECTIVE ACTION!

The *special* ointment base of Pendistrin Squibb melts quickly...penetrates glandular tissue...carries high-potency antibiotics throughout quarter.

It releases the antibiotics slowly, over a 48-hour period...organisms are attacked at moment in life cycle when most susceptible to antibiotic action.

Each "instant-use" tube of Pendistrin contains 100,000 units of penicillin plus 100 mg. of dihydrostreptomycin. Pendistrin is stable, non-irritating. Get it from your druggist! Write for free literature: E. R. Squibb & Sons, Veterinary and Animal Feeding Products Division, Dept. SF-10, 745 Fifth Ave., New York, N. Y.

Get handy "barn box" from your druggist!

Be prepared to treat mastitis *at the first sign*. Keep Pendistrin on your barn shelf. Requires no refrigeration. Get barn box of 12 tubes from your druggist!

For the most common kind of MASTITIS
SQUIBB PENICILLIN OINTMENT

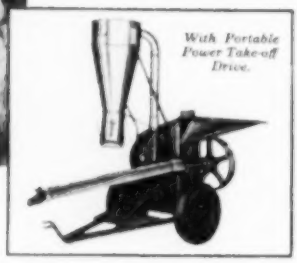
For mastitis caused by *Streptococcus agalactiae*—the most common kind—use Squibb "Instant-Use" Penicillin Ointment. Get it from your druggist....today.

For accurate diagnosis of mastitis, consult your veterinarian.

PENDISTRIN (Reg. U.S. Pat. Off.) is a trade mark of E. R. Squibb & Sons

SQUIBB — A NAME YOU CAN TRUST

THE HAMMER MILL OF GUARANTEED BEST PERFORMANCE



With Portable Power Take-off Drive.

● Every Papec Model X Hammer Mill is GUARANTEED to grind *any* dry feed to *any* desired fineness faster and cheaper than *any* other mill in the same power class.

Model X features include . . . larger grinding cylinder . . . 2 grinding screens instead of one . . . patented reversible 3-ply hammer tips . . . non-clog feed delivery . . . finer grinding with coarser screens. Transport and power take-off drive are available as extra equipment. With them you can grind your feed anywhere . . . at the granary or in the feed lot . . . and save a lot of lifting and hauling.

For FREE booklet on the Papec Model X, see your Papec dealer or send name on margin of this ad. Papec Machine Company, 7310 So. Main St., Shortsville, N. Y.

★ PAPEC ★

Model X HAMMER MILL

Also FORAGE HARVESTERS · ENSILAGE CUTTERS · CROP BLOWERS
HAY CHOPPER-SILO FILLERS · FEED MIXERS

Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 135. Visit store nearest you for help with decorating problems.

LIFE-TIME aluminum GATES

Also made in galvanized spring-steel. The best—most beautiful gates in the world. Cost less than heavy wooden gates. The new FENCE-MASTER steel gate, made exactly like the famous LIFE-TIME aluminum gate will eliminate those gate troubles and dress-up your gate with a shiny chrome look. Replace those sagging gates. N O W! See these amazing Alprodco Gates at your local Lumber Yard, Building Material or Implement Dealer. (14 factories) Write for free descriptive folder today. Address—

ALPRODCO INC., Mineral Wells, Tex.
ALPRODCO INC., Kempton, Indiana

30 SHOTS

30 Shorts or 20 Long Rifle cartridges—world's largest magazine capacity. Greatest number of sighting combinations available on any rifle. Just two of many reasons for the tremendous popularity of the 146B.

Model **146B** 22 cal. **$28.95** (Slightly West of Rockies)

YOUR MOSSBERG DEALER WANTS TO SHOW YOU THIS ONE

And when you see it, note the fine quality, the beautiful finish. Compare it with the finest!

No sales at factory

Send for **FREE** catalog

O. F. Mossberg & SONS, INC.

99510 St. John St., New Haven 5, Conn.

Livestock minerals

From page 151

eral mixture offered to animals free-choice is another method.

At the moment, cobalt supplies are extremely tight and you may have trouble in finding some to feed if you need it. The next cheapest source is one of the trace-mineralized salts which contain cobalt. Usually the most expensive source of cobalt is one of the complex mineral mixtures which generally are not recommended.

Manganese

The importance of supplying extra manganese under some feedlot conditions was emphasized in studies of a peculiar leg deformity in chickens and other poultry. This deformity is called "hock disease" or "perosis." This condition was shown to be due to a lack of adequate manganese—also some other nutrients—in the ration. Thus, the addition of approximately 4 ounces of manganese salts per ton of poultry feeds rests on firm foundation.

The addition of manganese salts to rations of farm animals other than poultry is unnecessary. It has been shown that pigs need manganese and without it they develop a leg weakness, stiffness, and poor growth. However, it is difficult to imagine any ordinary combination of feeds that would not supply the small amounts of manganese needed, especially for pigs on pasture.

The need of dairy cattle for manganese over and above that found in ordinary rations is also unsettled at the moment. Clearly, then, the final recommendation with respect to manganese additions to pig and dairy rations must wait until more studies have been made.

Many claims have been made for feeding the trace minerals either alone or as a group. Some of these claims either do not rest on valid information or are clearly fantastic.

One claim sometimes made is that cobalt supplementation will cure and prevent ketosis or acetonemia in dairy cattle. This theory has not stood the test of careful studies and at the moment must be discarded. Another claim sometimes made is that the trace-mineral elements will prevent or cure brucellosis in cattle and undulant fever in man.

Until these claims are backed with solid evidence, they must be regarded as "possible, but highly improbable." END

Do you have a question?

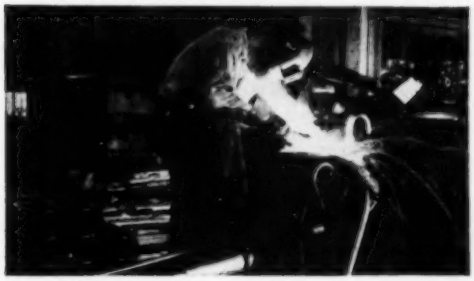
Through our Farm and Home Service Bureau, *Successful Farming* offers you personal-letter help with your problems without charge. Please outline all details of your question clearly when you write. If referring to an article in the magazine, mention page number and month of issue.

Address your inquiry to The Farm and Home Service Bureau, *Successful Farming*, Des Moines 3, Iowa.

Has America enough POWER?

The U. S. today uses twice as much electricity as before World War II. Is there enough for defense, for civilian needs and for such giant jobs as A-bomb manufacture? Here's how the electric light and power companies are meeting – and staying ahead of – these huge needs.

NO JOB TOO BIG. Some people say that the really big electric power projects are jobs only the government can handle. The facts disprove this. Five local electric companies have offered to develop all additional power available at Niagara Falls with a giant new power plant. Five other business-managed companies are completing one of the largest single power plants ever built at one time—a project that will supply power to the new A-bomb plant at Paducah, Ky. Fifteen companies are ready to handle an even greater project for the Atomic Energy Commission. The electric light and power companies are ready and able to do the nation's power job – *and they can save you and other taxpayers many millions of dollars by doing it!*



PLENTY OF POWER. The electric companies have kept pace with the fast-growing demands for power. These companies met the unprecedented needs of World War II. And now, in the midst of their greatest expansion program, they have already *doubled that wartime supply!* The only real shortages of electricity are in countries where national governments control the power industry.

ERA OF TEAMWORK. The electric companies, where there is no interference from the federal government, work together with municipally-owned power systems and farm electric groups. Electric companies' rates and earnings, of course, are closely regulated by state commissions or local authorities. However, federal electric projects are *not* subject to such regulation.

Important strides have been made by electric light and power companies in meeting the nation's huge power needs. The companies' record of performance shows the fallacy of arguments advanced by those who want the federal government to take over more and more of the electric business. This brief report is brought to you by America's ELECTRIC LIGHT AND POWER COMPANIES*.

LISTEN TO CORLISS ARCHER—new time effective October 3rd—Fridays, 9:30 P. M., E. S. T.—ABC Network

*Names on request from this magazine

Forgotten Anniversary?

could be YOUR FAULT!

If your husband's neglect is making you miserable, the reason may be so simple that you haven't realized it could be so serious. Carelessness about intimate feminine hygiene can bring doubt, uncertainty—even definite "coolness"—into an otherwise happy marriage, and what a shame to let this happen to you . . . when effective precaution is as simple as douching with "Lysol." It couldn't be easier!

"Lysol" has a medical background! This proved disinfectant, used in a douche, completely cleanses the vaginal canal—even in the presence of mucous matter. It kills germ life quickly, on contact. Yet, "Lysol" is non-caustic and gentle. It will not harm delicate tissues!

You need never again be guilty of offending—even unknowingly—if you remember that complete internal cleanliness is the way to counteract unpleasant odor. "Lysol" *does* this, helps keep you dainty!

Get "Lysol" today, at your drug counter. Use it in your douche. Be sure of yourself—secure in your marriage!

Preferred 3 to 1

over any other liquid preparation for Feminine Hygiene

"Lysol" Brand Disinfectant

REG. U.S. PAT. OFF.

A Concentrated Germ-Killer that will not harm delicate tissues

A deep, springy nap is more important than the weight of the blanket. Air cells among long fluffy fibers hold in body warmth

Binding may be keynote of quality in blanket—should be heavy, attached with double stitching, neatly finished at corners

Photographs: Fletcher

Pattern in a blanket makes it beautiful as well as practical. New lengthwise-pastel-stripe wool blanket has towels to match it

Are you going to buy a blanket?

By Shirley Mapes and Phoebe Ammon

Buying a blanket for your bed calls for as much shopping skill as buying a coat for yourself, these days. In fact, there's probably *more* to know about blankets—they even come in electric models!

Here are blanket-buying suggestions to help you get the most for your money.

Nap. Warmth with light weight is the byword for today's blanket. To give it this quality, the nap (the surface yarns) should be fine, deep, and even. The nap should not have a matted look, and it should spring back into shape after you've pressed your hand into it. Excess shedding means poor wearability.

Fiber. Many fibers have come into their own as blanket materials. Each one, by itself, or in combination with another, has certain advantages.

Blankets of 100 percent wool are expensive, but are outstanding for warmth.

[*Turn to page 156*

Blankets to suit the season give more sleeping comfort. This one of wool and nylon is a sheer cover for mildly cool nights

Dynel blanket, made of new synthetic fiber, has a firm, compact nap. It is warm, doesn't shrink when washed, resists moths

WHAT A WONDERFUL WAY TO

ENJOY YOUR FARM MORE!

The owner of this Ohio farm wrote us about this window: "We have enjoyed it immensely all of this last winter, being able to get a view of the garden and birds, even though other windows in the house were well steamed up."

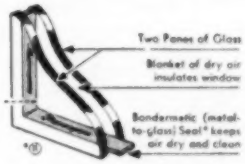
This big picture window is *Thermopane** insulating glass. It consists of two panes of glass, with a blanket of dry air hermetically sealed between them. It cuts down condensation on windows. *Thermopane* helps keep rooms cooler in summer, warmer in winter. Reduces fuel bills.

Replace little windows with a picture window of plate glass *Thermopane* like this. And for extra comfort, use it in all windows when you build or remodel. *Thermopane* is easy to install. It is sold by glass and building supply distributors and dealers. Write for further information.

L·O·F GLASS PRODUCTS

Thermopane

LOOK FOR THE NAME ON THE SEAL BETWEEN THE PANES

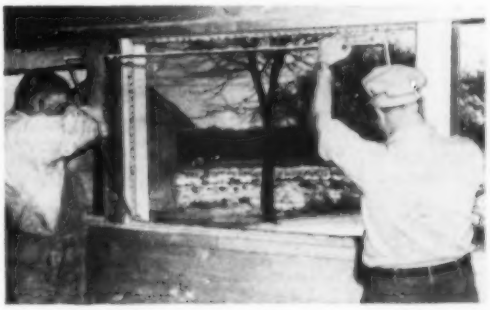


NEW LOW-COST *THERMOPANE* FOR SERVICE BUILDINGS

With large windows facing south, you can bring in winter sun to keep interiors warmer and drier—for better animal health and production. To *keep* more winter sun heat and animal heat inside, insulate windows with *Thermopane*. An extended roof overhang will shade the windows from summer sun.

L·O·F's new Farm *Thermopane* for service buildings is made with heavy sheet glass ($\frac{3}{16}$" thick), not plate glass. Hence, it costs less. It has ½" air space between the panes—comes in sizes 36" x 44", 36" x 60" and 40" x 68". Smaller units for ventilating sash are available in low-cost, double-strength window glass, with ¼" air space.

Our booklet "Improved Farm Building Daylighting" contains helpful information on solar farm buildings, window insulation and ventilation. Write for your copy and for our booklet "Self-insulating Windows of *Thermopane*".



Libbey·Owens Ford Glass Company, 25102 Nicholas Building, Toledo 3, Ohio.

Home Planning Help There's a store near you offering **Successful Farming's** home planning service. See page 135 for more about this service.

Buy a blanket?

From page 154

A blanket of new wool is labeled "virgin" wool. "Reprocessed" wool is that which has been woven or knitted for some other purpose but never used. "Re-used" wool has previously been made up into something else. Reprocessed- or re-used-wool blankets may be of good quality, but may tend to mat and felt in washing, causing shrinkage.

Wool may be blended with cotton, nylon, or rayon to make blankets of lighter weight. Such combinations make it possible to choose a blanket with just the right amount of warmth to suit the season. (The higher the wool content, the warmer the blanket.) A wool-mixture blanket usually shrinks less than an all-wool blanket. It is also likely to be less expensive.

Other economical blankets suitable to warm weather are all cotton, or blends of cotton and rayon.

An interesting new synthetic fiber used for blankets is Dynel. In warmth and appearance it is similar to wool. Dynel is long-wearing and does not shrink noticeably when washed. Dynel will not burn.

Weave. Pulling aside a few nap yarns, and holding a blanket up to the light, you can see the weave. Good blankets have a close, strong weave.

Bindings. Blankets may be finished with satin, taffeta, or sateen bindings. If you buy this type, be sure the binding is eased onto the blanket (to allow for shrinkage), and that it is attached with two or three rows of firm stitches. Hem or yarn bindings are also used—they give added strength to a blanket.

Size. Measure your beds before you shop. A blanket should be as long as the length of the mattress, plus the thickness of the mattress, plus at least 6 inches for tucking in. And don't forget to allow for shrinkage—unless the label says "shrinkage controlled."

Labels. The better blankets have very helpful labels on them. Read them well to learn all the facts about the blankets and how to care for them. *Save these labels* so you'll remember washing methods.

Electric blankets. Don't overlook the automatic blanket when you go shopping. One lightweight electric blanket often gives all the warmth needed even in the most severe weather. Though it may be expensive, an electric blanket may be more economical than two or three non-electric ones. The even and comforting warmth of an electric blanket is safely controlled by a thermostat which is set for the amount of heat you want. Those for double beds even come with two controls so each side of the blanket can be held at a different temperature! Most automatic blankets can be washed. An assurance of safety is the seal of the Underwriters' Laboratories. **END**

Better files for better filing

Put a Nicholson or Black Diamond file to work and it will perform well on job after job—earning its cost over and over. That's why thousands upon thousands of stores sell one or the other of these long-lasting, high-quality brands.

Your hardware dealer will be glad to help you select a practical assortment for your particular farm needs. Mighty helpful, too, is this widely read Nicholson booklet:

"*FILE FILOSOPHY*"

—Tells about kinds, use and care of files and rasps. Includes information on saw and tool sharpening, implement repairs, etc. 48 illustrated pages. Write for your copy. *FREE.*

NICHOLSON FILE CO.
12 Acorn Street
Providence 1, R. I.
(In Canada, Port Hope, Ont.)

NICHOLSON FILES *FOR EVERY PURPOSE*

Enjoy better farm living . . .

. . . by letting *Successful Farming* continue to help you solve all your farm problems.

WHY PAY MORE for an ELECTRIC SHAVER?

WHISK AWAY EVEN A 7 DAY BEARD WITH THE WHISKER ELECTRIC SHAVER

Precision-built, with .002" thin blade that shaves all beards smoothly, closely.

Whether you shave once a day, or once a week you'll like WhiskER Electric Shaver. Its clipper-like blade is designed for all beards, is definitely less irritating. 110v AC model; no TV or radio interference. See your barber or dealer. If he cannot supply you, send $15.95—we pay postage, or send $2, you pay balance plus postage and COD. 10-day money-back guarantee.

BABET ELECTRIC HAIR CLIPPER
Cuts hair, removes superfluous hair from legs and under arms. The same fine quality clipper used and sold in many beauty shops. See your shop, or dealer. If you prefer, send $10.95—we pay postage; or $2, you pay postman balance, postage and C.O.D.

ELECTRO TOOL CORP., Dept. WHS-K, Racine, Wis.

Knitting helps

Here are answers to four questions commonly asked about knitting

1. How important is equipment?

Extremely important! Knitting directions are written carefully for specific needle size. If these needle instructions are not followed, the knitted article will not be the correct size when completed. The type of needle—single point, double point, or circular—also is given for each pattern. All needles, regardless of material (wood, plastic, and metal alloys are most common), should have smooth points. Blunt points will split the yarn.

A knitting bag should include the following as minimum equipment: crochet hook, yarn needle, transparent ruler, scissors, and stitch holders.

2. What should a knitter know about yarn?

One of the most important things to look for in selecting yarn is the dye lot number. This is printed on the band around the yarn. Since dye lots may vary within a particular brand and color, make certain that each ball or skein has an identical set of dye lot letters. It is wise to purchase more than the required amount of yarn to insure satisfactory results. Most stores will accept unused yarn if it is in good condition and returned within a short while after you have purchased it.

When winding a hank of yarn into a ball, always wind loosely. Tightly wound yarn loses its stretch.

3. How do you follow instructions?

Instructions are written to be followed and not merely read. Scan your pattern once over to be sure you are familiar with all of the stitches, but work each pattern part to its conclusion before struggling over reading the following part.

Be sure you are acquainted with all of the abbreviations used in instructions. These abbreviations are usually explained in knitting books or with single patterns.

4. How do you determine gauge?

Gauge, correct or incorrect, influences the fit of a knitted article. Gauge should be checked for each pattern stitch and will vary according to type and even the color of the yarn.

To determine gauge, cast on about 24 stitches and work 3 inches of the desired pattern, removing from the needles without binding off. Flatten this piece on a smooth surface and count the number of stitches in 2 inches of the knitted swatch. Divide in half to determine the stitch gauge for 1 inch.

To correct loose work (fewer stitches to an inch than pattern suggests), use a smaller-size needle. Tight work, indicated by more stitches to the inch, can be corrected with larger-size needles. **END**

Pattern Service

FOR SEWING WITH COTTON BAGS

Buy products in Cotton Bags and you SAVE container costs! FOR CHRISTMAS, convert the valuable fabric into clever, economical gifts like these . . .

. . . A smart, new, and oh-so-practical housecoat. Make it in a jiffy from easy-to-sew Simplicity pattern, and only TWO 100 lb. bags!

. . . And to delight any youngster, a cuddly, floppy rag doll! These are just two of the many gift and fashion ideas illustrated in "Pattern Service."

FREE BOOKLET

. . . with the compliments of your manufacturer who packs in Cotton Bags. "Pattern Service" contains 24 pages of smart, practical suggestions for sewing with Cotton Bags.

NATIONAL COTTON COUNCIL, Dept. S
P. O. BOX 76, MEMPHIS, TENN.
Send FREE "PATTERN SERVICE" booklet.

Name_____
Address_____
City_____ Zone_____ State_____
Brand name of product I buy, or would prefer to buy in Cotton Bags:_____

Matched POWER

to Fit the Machine . . . and Fit the Job

WISCONSIN HEAVY-DUTY *Air-Cooled* **ENGINES**

Today, it's Engine Horsepower instead of steady-pulling "horse flesh." But *matched* power still makes the difference between poor and good performance . . . which is why Wisconsin Air-Cooled Engines are your best power buy. Every Wisconsin Engine matches the machine and job.

1 NO COOLING CHORES
A high efficiency fan, cast in flywheel, cools every Wisconsin by air alone. Nothing to freeze, no overheating, no cooling chores.

2 QUICK STARTS ALWAYS
You gain any weather quick starts due to a rotary type high tension OUTSIDE magneto with impulse coupling. Makes servicing easy.

3 BEARING PROTECTION
Timken tapered roller bearings support both ends of every crankshaft, taking up thrust loads . . . your best bearing protection.

4 BETTER LUBRICATION
Every Wisconsin Engine has a positive lubrication system . . . keeping down repair bills, adding to engine life, smoother running.

Write today for "Power Magic" telling about all 4-cycle single-cylinder, 2-cylinder and V-type 4-cylinder models, 2 to 30 hp.

MOST H.P. HOURS

WISCONSIN MOTOR CORPORATION
World's largest Builders of Heavy-Duty Air-Cooled Engines
MILWAUKEE 46, WISCONSIN

ONE-MAN SAWMILL LOW AS $50.00 DOWN

Take BELSAW Portable Sawmill right to the trees—turn out valuable lumber for local yards—do "custom sawing" for neighbors. BELSAW lasts a lifetime. No crew needed. Power with old auto engine. Beginners get excellent results. Send postcard for Free Book "How to Make Lumber."
BELSAW MACHINERY CO
5187 Field Bldg.
115 Westport Rd., Kansas City 2, Mo.

GUARANTEED AUTOMATIC STOCK TANK **NON-FREEZE**

EVEREADY • ECONOMICAL
COMPLETE, F.O.B. $87.50
BUILD YOUR OWN COMPLETE KIT $24.80
PLANS ONLY $2.00 • AMAZING RESULTS
THERMOFLOW TANK CO., PRATT, KAN.

WHICH

do you need... and how soon?

Whether it's a barn, machine shed, crib and granary or any other modern farm building, Rilco Rafters enable you to build faster, better, for less.

Rafters for the barn above, at left, for instance, were raised in just 3½ hours.

Rilco glued-laminated Rafters comprising entire roof framing are delivered cut to length, drilled for connection hardware furnished . . . ready for labor-saving erection. Important too, is the fact that Rilco Rafters are engineered for maximum wind resistance and snow loads. Interiors are post-free, brace-free—give far more working and storage space. No matter how large or small your farm, there's a Rilco Rafter for just the size building you need. Get more for your building dollar. Get money saving details from your Rilco lumber dealer or write for free literature.

RILCO RILCO *Laminated* PRODUCTS, INC.
2504 FIRST NATIONAL BANK BUILDING, ST. PAUL 1, MINN.

Stevenson

From page 30

Stevenson is no novice in federal service, either. He served as special counsel in the early days of the A.A.A. As a special assistant to the secretary of the navy during the war, he went to Italy to develop the first American program for relief and reconstruction. In 1945 he became special assistant to the secretary of state, and later was a high adviser to the United States delegation to the United Nations.

Adlai Stevenson isn't flashy. Rather, he is patient, diplomatic, hard-working, persistent, and able to get good men, Republicans and Democrats alike, to work with him.

Perhaps the biggest issue of all to many people is the length of time the Democrats have been in power, and the fear that another Democratic victory this year would "destroy the two-party system."

Governor Stevenson has an answer: "The record of the Democratic Party has been one of true progress. Of course you don't fire a man who is doing a good job just because he has done it for a long time."

The governor's answers to the major questions from *Successful Farming* readers are as follows:

What are your attitudes on U. S. foreign policy?

Governor Stevenson: Let's not kid ourselves that we can be anything but internationalists. The hard fact of Soviet communism imperialism presents a real danger to the free world now and for an indeterminate period to come. From this one fact flow many difficulties which we must face with understanding and stout hearts.

We should continue to stress the necessity for mobilizing our strength, both military and economic, in support of the free nations of the world; the importance of continued working toward the international organization and maintenance of peace through the United Nations; the value of regional organizations of strength, and the stepping-up of the kind of technical help provided under the Point Four Program.

How will you reduce government expenses, cut taxes, and stop inflation?

Governor Stevenson: We must realize that in the long run we get only what we pay for; we do not get something for nothing in government or in anything else. If the communities shift part of their normal responsibilities to the state or federal governments, their state or federal taxes will be higher and their control over the spending of their tax money will be farther from their hands. It's that simple.

The time has come when we need to fight inflation with the same zeal and vigor that we fight communism itself. Of course, you cannot stop inflation with a constantly spiraling pattern of prices and wages any more than you can put out a fire by pouring oil on it.

Carelessness with public funds is intolerable at any time, let alone in times of full employment like these. We need to see that the public dollar is spent as economically and as efficiently as possible.

Can we do more for less? I know we must. I think we can.

What will you do about corruption in our government?

Governor Stevenson: One corrupt public official is one too many. If there is Democratic dirt, let's clean it up and turn the flashlight into every dark corner.

What should be the place of the farmer and agriculture in our economy today?

Governor Stevenson: I don't pretend to know a great deal about farming, but I don't have to be sold on the proposition that the prosperity and happiness of all our people are inseparably linked with the economic well-being of our farmers.

I know that food and its distribution will do much to shape the kind of world we will live in during the next half century. But there is no escaping the fact that we will have an enormous, baffling, and unsolved problem of maintaining agricultural prosperity on the one hand and rationalizing and balancing the cost of that prosperity to the taxpayer on the other. The paradox of feast and famine in the world, the paradox of surpluses and high food costs at home are all too apparent in our international and our national life.

Will you abide by Christian principles in your administration?

Governor Stevenson: I shall ask my God for eternal guidance to nourish my spirit and give me courage and strength for this great undertaking. **END**

Fertilizer boosts labor income

Most farmers are sold on the idea that fertilizer increases crop yields but may be wondering if it doesn't cost too much. A recently completed study of a group of Michigan farms shows that fertilizer also increases labor income from the farm.

John Doneth, Michigan State College agricultural economist, went to the farm-account records of a group of Michigan farmers to find out the effect on the whole farm business from using fertilizer. He found that 31 farmers who spent between $3 and $4 annually per tillable acre for fertilizer had a labor income of $4,416. The 63 farmers in the study who spent between $2 and $3 per tillable acre for fertilizer had a labor income of $3,565. And those who spent less than $2 per tillable acre for fertilizer had a labor income of $3,095.

Marvel is a specially developed lubricant for today's high compression engines. Added to gas tank or crankcase, it goes to work immediately – eliminates hydraulic valve clatter... frees sticky valves... provides ring seal... cleans, cools and protects bearings and vital upper cylinder regions.

Install a Marvel Inverse Oiler for direct lubrication to the heart of your engine. Feeds in direct proportion to horsepower curve through inverse ratio to manifold vacuum. No other oiler works on this principle! Fully adjustable. Easy to install. Fully guaranteed.

Write for free information – Dept. 266

EMEROL MFG. CO., INC. 342 W. 60th ST., N. Y. 23, N. Y.

THIS SMALLER, REVOLUTIONARY Roderick Lean MOBIL-DISC IS PROOF TO YOU THAT THE MOST AND BEST HAD NOT YET BEEN DONE!

FOR THE FIRST TIME — You can accurately plan your acres and hours and sure *results* for any kind of discing task. No more under-cutting, over-cutting, bogging down or delays that you can't afford to have. You'll do more for less effort, less expense and with less delay than you've ever dreamed of.

- ★ Combined bush and bog harrow for use in the south . . . level cutting tandem disc harrow . . . western type harrow . . . master implement for fast, easy, sure pasture renovation—all this in one compact machine, the 7 and 8-foot MOBIL-DISC.
- ★ Has all the toughness, ruggedness and amazing elastic-"give" that has been welcomed the country over by our farm friends in the large MOBIL-DISC.
- ★ Has complete utility and transportability through the use of hydraulic-controlled, rubber-tired wheels.
- ★ Has complete adaptability to single-acting cylinder because of new, built-in depth control — makes single-acting cylinders completely satisfactory and easy to use.
- ★ For the north, midwest and west, it has a special gang arrangement that fulfills every need.
- ★ For the south and east, it has better blade spacings — better blade diameter—better blade concavities — better cutting angles to do all the things that have been done singly by many machines, but have never been done for you by one machine.
- ★ Has 5-year guaranteed "Indestructo" bearings — plus all the other outstanding features of the larger MOBIL-DISC.

SEND FOR COMPLETE DETAILS ON THIS MONEY, TIME AND LABOR SAVING MOBIL-DISC

FARM TOOLS, INC.
Manufacturers
Quality Farm Implements since 1892
MANSFIELD, OHIO, U.S.A.

Send for the Facts Today!

FARM TOOLS, INC., Mansfield, Ohio
Dept. D
Send me complete details on the 7 and 8-foot MOBIL-DISC.

NAME _____

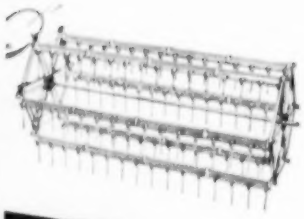
ADDRESS _____ R.F.D. NO. _____

CITY _____ STATE _____

don't

shatter your

bean profits



HUME PICK-UP REEL

Picks 'em up GENTLY without shattering, skipping

A Hume Pick-Up Reel on your combine means a bigger harvest whether beans are standing or down. Gentle action avoids shattering, gets ALL the crop. Ideal for small grain, too.

Write for complete information

If you own a combine you need a

HUME REEL

H. D. HUME COMPANY - Mendota 19, Ill.

WORLD'S BEST BARGAIN

POST HOLE DIGGER

America's best low-cost digger. Fits all tractors. Easy mount and transport. Quick clean holes to 44" deep. P.T.O. drive. Replaceable cutting blades. Save time and labor. Lower fencing costs. Do a day's hard, hand work every hour. Also, one man super-diggers available.

WRITE FOR FREE FOLDER TODAY!

WINDPOWER

NEWTON, IOWA

Eisenhower

From page 37

international disarmament and a respected United Nations.

As supreme commander of the North Atlantic Treaty Organization forces, Ike has had experience in uniting sharply conflicting and explosive interests into one organized, cooperative effort. Coordinating the 14 member nations seemed an insurmountable task, but under his shrewd leadership, with the Eisenhower patience, tact, and diplomacy, it was successfully completed.

He has had experience in dealing with the Russians. The best formula for handling them, he has said, is "firmness, patience, a sense of humor—and keep your powder dry!"

He wants all major segments of our economy to work together without playing off labor against management, farmers against labor, or any single group against another.

The sheer pull of his personality and the highly idealistic goals he has for government will help him bring good leadership into federal service, his supporters point out.

After 20 years, Republicans insist, "It's time for a change." And they figure that Ike, who led Allied forces from the shores of Africa to the doors of Berchtesgaden, can triumph again in this different kind of a campaign that leads to November 4 and Election Day.

The general's answers to the major questions from *Successful Farming* readers are as follows:

What are your attitudes on U. S. foreign policy?

General Eisenhower's reply: I am ready to do anything I know in this world to help develop a workable, decent, satisfactory program for the promotion of the security and peace of the United States. That of course includes the peace and security of those nations with which we must trade in order to continue to exist.

The only way to approach our problems in foreign relations is from the standpoint of enlightened self-interest of our own country.

We don't want anybody else's property. We don't want to deprive anyone in any other country of rights equal to our own. We just want to live in decency and justice. To do that we cannot allow Western Europe to fall under the domination of Soviet Russia.

In this fight, I believe in helping everybody who is on our side.

Arms alone, of course, are sterile. Arms and soldiers help give our friends a feeling of security, but the long-range answer is more dependent on greater effort in other fields of productivity by the aroused, determined, resourceful citizenry of those countries fighting over the world to resist communism.

I think we have reached the peak of our expenditures in this area, and they can now begin to come down, and we

New BEAR CAT B1

COMBINATION Grain and Roughage Mill also Ensilage Cutter

with Adjustable Drop-Apron FEEDER

Trailer Mounted for Power Take-Off

Furnished either with or without drop apron feeder and power take-off with trailer as shown. Grinds any feed, green, wet, or dry, shapped or ear corn, roughage bundles or baled flakes, with ordinary farm tractor, and no monkey business. Has both cutter knives and heavy swing hammers. Get full information on this real honest-to-goodness Grinding outfit. Four sizes available.

..also a BEAR CAT Tractor Hoist

Better than a Hired Man

The handiest and most practical lift you have ever seen or used for dumping corn or grain wagons, unloading and loading machinery, pulling out fence posts, stretching wire, lifting heavy objects, and a thousand and one other farm jobs. Simple in construction, quick to attach and detach. For tractors equipped with hydraulic pumps. Light in weight, leave on tractor. Does not interfere with take-off drive or hitch.

For full information about either Bear-Cat product described here and name of dealer nearest you — Write us today. No Obligation.

Western Land Roller Co., Dept. 606

Hastings, Nebraska—Manufacturers

The average value of farm implements and Machinery of Successful Farming farms is nearly double the U. S. farm average. Write for classified advertising details.

SOLVES DEEPWELL PROBLEMS

ALLIANCE, NEBRASKA—L. F. Powell was looking for two things in a vertical turbine pump and apparently he found them. He says:

"I talked with other owners of Worthington pumps and found they couldn't be beat. That's why I 'went Worthington.' Also, this Spring I asked for an efficiency check on my Worthington pump and it wasn't no time until the Worthington service people were out. I call that real service. My pump works as if it was built and designed especially for my well."

Ask *your* Worthington dealer to show you the chart that proves *only* the Worthington Vertical Turbine Pump—in the newest and broadest line available—gives you all 8 "service-sure" features. Worthington Corporation, Denver 16, Colo.; Succasunna, N. J.

D.2.2

LEO DRAKE
Winner of
1951 NATIONAL PLOWING CONTEST
SAYS:

"I used a LANTZ Coulter"
Reg. U. S. Pat. Off.

Lantz Kutter-Kolter

Yes, Mr. Drake used one Lantz Kutter-Kolter on his contest plow . . . and he uses them on both his five-bottom and three-bottom farm plows. For over 14 years, numerous plowing contests and thousands of farmer users have been proving that Lantz 2-bladed Coulters help do a better job of plowing . . . once over. Your plow will cut and cover more trash with Lantz 2-bladed Coulters than with any single-blade coulter. Helps fight corn borers . . . cuts plowing time . . . saves manpower.

New Model "B" with cross-over scissor action.

Where trash is no problem, the Lantz Kutter-Kolter may be used as a single-blade coulter by removing the disc blade. Best all purpose coulter made . . . more for your money. *Write for literature and name of nearest dealer.*

LANTZ MFG. CO., INC.
Dept. 22, Valparaiso, Indiana

HELPFUL SUGGESTIONS for solving all types of farm problems are found in each issue of *Successful Farming*.

Money-Making
FARM FACT

All year 'round, keep plenty of tough, waterproof, windproof SISALKRAFT protective paper on hand for many farm jobs it does so well!

put SISALKRAFT to work

Save time, money and valuable feed with SISALKRAFT. It makes dependable temporary silos for grass or corn silage. Trench silos, too, need SISALKRAFT protection.

Protect your HAY!

SISALKRAFT hay-stack covers are famous hay-savers . . . dependable protection from rain, rot and sun-damage.

SISALKRAFT and SISALATION protect and improve homes and all farm buildings. AVAILABLE AT YOUR LUMBER or BUILDING SUPPLY DEALER

For FREE SAMPLES . . . MAIL this COUPON!

The SISALKRAFT Co., Dept. SF10
205 W. Wacker Drive, Chicago 6, Ill.
Please send free samples and information on SISALKRAFT protective paper and SISALATION insulation.

Name..... RFD.....

Town & State.....

SISALKRAFT WATERPROOF REINFORCED PROTECTIVE PAPERS

THE SISALKRAFT CO.
Chicago 6, Illinois
New York 17, N. Y. • San Francisco 5, Calif.

still can reach our goals. Of course, we have got to see that our citizens get a clear picture of what we're doing—our goals, what we expect other nations to do, how much all this will cost, how long it will take. We must get rid of the kind of secrecy that surrounded Yalta.

How will you reduce government expenses, cut taxes, and stop inflation?

General Eisenhower: We have got to eliminate waste and duplication. I know plenty of places to cut expenses, and I expect a Republican Congress to help me find even more places.

First of all, I would eliminate deficits because deficits are the most dangerous thing we can have in a time like this. In family life, if we spend more than we make, the sheriff dispossesses us. I don't see how a nation can expect different treatment.

Then we must work, all of us, toward getting taxes back in the area where incentives for excellence in skill in production are not stifled, because it is this excellence which in my opinion has made America great.

It is necessary for all of us to use our resources economically and frugally. We shouldn't forget the good old American thrift that has also helped to bring the United States where we are today.

What will you do about corruption in our government?

General Eisenhower: Graft and incompetence are inevitable consequences of one party's being in power too long. We need better citizenship than this, because the people in Washington, the people on the federal pay roll anywhere are working for the people everywhere, all are Americans. They have a high trust to be our very best citizens.

If they fail to live up to that trust, I say the punishment ought to be swift and severe, and it will be.

What should be the place of the farmer and agriculture in our economy today?

General Eisenhower: I have said the American farmer is the foundation stone of democracy, and I think this is a correct description.

Farmers traditionally are the most independent of all people, and we must keep them so.

We must see to it that agriculture never suffers disasters due to natural causes or problems farmers cannot foresee. It is in the interest of everyone that we have a prosperous agriculture. Our farms must have high productivity so we can maintain the defensive power the nation needs to have to hold peace.

Will you abide by Christian principles in your administration?

General Eisenhower: I know no other way of living. Nobody goes through six years of war without faith. A democracy cannot exist without a religious base. I believe in democracy. **END**

GALVANIZED SHEETS

For PROTECTION

Only galvanized sheets give you the strength of steel . . . the rust protection of zinc. Both are important in providing a strong, sound, leak-proof roof that double-guards valuable crops, livestock and machinery against damage and destruction for years and years. It's the first choice of farmers.

For STAYABILITY

Galvanized roofing holds at the nail holes . . . stays leak-proof and solid year after year with a minimum of maintenance. Farmers say it cuts down overhead by staying "overhead"—often for the life of the building.

For ECONOMY

Consider the economy of any roofing material with these three long-time cost factors in mind: (1) original price; (2) repair and upkeep; (3) years of serviceable life. Galvanized sheets are first choice of farmers because they know that the roof that gives them the longest, trouble-free service is the cheapest in the long run.

DON'T FORGET

Proper care pays! Material shortages are limiting new construction and replacement. Careful maintenance of present structures is more essential now than ever before. Expanding production of zinc and steel means ample supplies of galvanized sheets with the return of more normal conditions. In the meantime, a few simple steps with very little labor can extend the useful life of your galvanized roofing. The valuable booklets described below will tell you how.

ZINC INSTITUTE 2 OZ. COATING SEAL OF QUALITY

AMERICAN ZINC INSTITUTE
35 E. Wacker Drive, Room 2628
Chicago 1, Illinois
Without cost or obligation, send the illustrated booklets I have checked.

- ☐ Facts About Galvanized Sheets
- ☐ List of Metallic Zinc Paint Mfrs.
- ☐ Directions for applying Galvanized Sheets
- ☐ Repair Manual on Galvanized Roofing and Siding
- ☐ Use Metallic Zinc Paint to Protect Metal Surfaces

NAME.....
ADDRESS.....
TOWN AND STATE.....

Send for FREE Booklets

● With land played out and crops failing, this farmer planted a few acres in grass to try a comeback with a small dairy herd. Manure from the barn was flushed into a drainage tank, and later sprayed back over the land. Today, he not only has one of the finest herds in his state, but his land is rich and fertile again . . . thanks to treatment made possible by Flowing Water!

You'll make more money, too, with Flowing Water, and extra dividends in health and comfort for all the family. These advantages can be yours most dependably and economically with an F & W Water System. For example, the F & W Multi-Stage Deep Well Jet Pump, shown above, has a patented control-valve that automatically keeps the pump at top efficiency throughout the pumping range. This, plus precision manufacture and advanced design assure longest service and lowest cost per year. Whatever you need, there's an F & W model with comparable advantages to meet the problem.

F & W Means Flowing Water by
FLINT & WALLING MFG. CO., INC.
1091 Oak St., Kendallville, Indiana

Send for Free Booklet "Running Water for Rural Homes"

F&W WATER SYSTEMS

FARM-USED, FARM-PROVED FOR 86 YEARS

Amazing Sunflower ROTO-SAW
A GREAT LAND CLEARER
Attach to Ford or Ferguson

SAWS DOWN TREES
SAWS UP LOGS
Cuts Branches and Brush
MAKES MONEY
LOW PRICED!

Get the facts on this new and better patented power saw. Many superior features. One man operated. Outstanding for fast, safe, dependable sawing. Adjustable to many angles. Quickly attached to Ford or Ferguson Tractors.

A Great Work and Time Saver! Fells trees fast! Zips up logs and branches. Soon pays for itself. **FREE FOLDER!** Find out how easy and cheap it is to own a Sunflower **ROTO-SAW,** also weed and brush cutter and post-hole digger. Some openings for dealers and agents. Write today!

SUNFLOWER INDUSTRIES, INC.
539 South Kansas Ave. Olathe, Kansas

Prizewinners

in Successful Farming *Candidates' Questions Contest*

Remember when we invited you readers to put your big question directly to the major presidential candidates? Thousands of you replied with excellent, important questions—the kind you'd like to ask if you could talk to Eisenhower and Stevenson in your own living room.

Successful Farming editors picked the subjects which concerned you most and asked both Adlai Stevenson and Dwight D. Eisenhower to give you their own thinking on each one. (For Stevenson's answers, see pages 36, 158, and 159; for Eisenhower's, pages 37, 160, and 161.)

We awarded prizes to the following readers on the basis of the importance of their questions and the reasons given for asking them. And though the questions answered by the candidates do not follow the prizewinners' word for word, they capture the same feeling and spirit these readers have expressed.

First-prize checks go to:

Bertha L. Bond Emerson, Route 2, Mexico, New York.
Mrs. Fred G. Goebel, 4259 Bowman Avenue, Indianapolis 27, Indiana.
Mildred C. Neff, Route 5, Goshen, Indiana.
Mrs. Claude L. Nye, Route 1, Allerton, Iowa.
Valta Peck, Lakewood, Wisconsin.
Wilfred P. Riggs, Willsboro, New York.
Mrs. Dixie Robinson, Route 1, Smithton, Missouri.

Honorable Mentions go to:

Q. A. Cheadle, Groveport, Ohio.
Mrs. M. A. Dunn, Route 1, Elkland, Pennsylvania.
Mrs. George Evans, Box 43, Doyon, North Dakota.
Mrs. M. J. Logan, De Russey Road, Collins, Ohio.
Robert Moogk, 1101 Sixth Street, Mendota, Illinois.
James W. Sherrick, 11 Glenoak Street, Greensburg, Pennsylvania.
J. O. Tressler, 608 North Main Street, Celina, Ohio.

SUCCESSFUL FARMING

"Yessir, the first words I ever spoke were—
CINCO-THERMOSEAL

"Seems like that's all my folks ever talked about. Pop loves 'em because he never has to change screens or storm windows. Mom is always raving about how they keep the home warmer in winter, cooler in summer and so much cleaner. And of course that year'round rainproof, draft free ventilation is out of this world."

CINCO-THERMOSEAL
DE LUXE ALUMINUM
COMBINATION SCREEN & STORM SASH

For free literature and name of nearest dealer, write Dept. 3-SF102
THE CINCINNATI FLY SCREEN DIVISION
of the F. E. Russell Company • Cleveland 1, Ohio

Ask your
Field Service Man

He stands ready to answer your questions or refer them to *Successful Farming*'s expertly staffed Subscribers' Information Bureau.

Make it a point to ask him to show you a copy of *A Better Living From Your Soil*. He can show you how it helps you to do better farming and enjoy better living, how to better profit from your farm, and how future articles in *Successful Farming* will keep you posted on the latest developments in soil care.

SUCCESSFUL FARMING
FIELD SERVICE MAN

A cure for plant anemia

Plant anemia may no longer be a serious problem to farmers with iron deficiencies in their soil. Two scientists have come up with what may be a one-treatment cure for the trouble.

Roy A. Bowden of the University of Georgia and F. L. Wynd of Michigan State College have developed the one-treatment cure — "frit."

Frit is a specially compounded glass containing ferrous sulfate, and, in some cases, other elements necessary to plant health. The iron-laden glass is ground into fine particles for use.

The iron substance is considered a one-treatment cure for anemia in plants because it is highly insoluble and remains in the soil for long periods. Protection of the ferrous sulfate with the glass keeps the iron from changing to ferric sulfate, a form of iron not usable to plants.

Frit is mixed into the soil so as to come in direct contact with plant roots. It will not be effective in controlling anemia if scattered on top of soil.

The compound has been successful in controlling anemia in small fruit and flowers in the University of Georgia experiments. Frit is not yet considered practical for crops such as corn or oats because of the high cost of application.

The iron compound is considered practical for use on high-income crops such as tobacco or peanuts. Exact amounts of the compound to be used per acre are not definitely established.

Antibiotics for crop diseases?

The same antibiotics used to control human diseases may soon be helping to check diseases and insects in crops.

According to Dr. H. C. Young of the botany and plant pathology department at the Ohio Agricultural Experiment Station, experiments are being planned to determine if the antibiotics in solution will flow freely through plant tissues, permitting control of fungus infections.

Some work has been completed on fruit and other trees, and on beans. Tests showed that streptomycin prevented halo blight in beans when applied to the seed. However, recommendations cannot yet be made concerning results on trees.

Slowed down by LAXATIVE LAG?
Get relief with gentle, speedy Sal Hepatica!

When you feel sluggish or headachy due to the need of a laxative, take gentle, speedy Sal Hepatica.

You'll avoid "Laxative Lag"—that feeling of discomfort that continues for hours until ordinary, slow-acting laxatives bring relief. Here's how . . .

In the morning . . . take sparkling Sal Hepatica before breakfast—enjoy gentle relief usually within an hour.

In the evening . . . take gentle, speedy Sal Hepatica one half-hour before supper—get relief before bedtime.

Sal Hepatica is an all-purpose, antacid laxative. Sweetens sour stomach. It is a recommended laxative by more than half the doctors interviewed in national survey.

SAL HEPATICA
Antacid Laxative

A PRODUCT OF BRISTOL-MYERS

PEERLESS ROLLER MILLS
Portable Power Take-off and Stationary Models
Crimp, crack all grains better, faster with less power. AVOIDS DUST. Giant 10-in. Tuf-Cast rolls. Farm, Feeder and Mill sizes. Write for literature and prices.
PEERLESS JOPLIN, MISSOURI Dept. 502

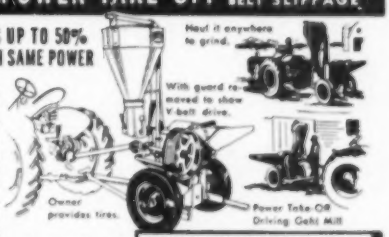
UNION FLEX-BEAM FORKS
unbreakable where other forks break
The Union Fork & Hoe Co.
Columbus 15, Ohio

Enjoy better farm living . . .
. . . by letting *Successful Farming* continue to help you solve all your farm problems.

Boost your mail order business with a classified advertisement in Successful Farming.

GEHL Grind-All HAMMER MILLS
NEW POWER TAKE-OFF ELIMINATES BELT SLIPPAGE
GRINDS UP TO 50% MORE WITH SAME POWER

This new Gehl Power Take-Off and its six V-belt drive avoids the usual power loss and speed variation due to tight tractor belts or belt slippage. It holds the mill steadily to the speed at which grinding action is most effective and further increases the well known high efficiency of the Gehl Mill . . . steps up its grinding capacity as much as 50% with the same power.



Standard Gehl Grind-All Mill. Famous for big capacity with low power, positive non-clogging feed to blower.

WRITE today for full description of this time and labor saver, and name of nearest Gehl dealer.

Manufacturers of famous Gehl Forage Harvesters

GEHL BROS. MFG. CO., Dept. ML-500, West Bend, Wis.

GRIND ANYWHERE . . .
The Gehl Power Take-Off Hammer Mill Drive is easily and quickly attached. Can be had complete with new Gehl Grind-All Hammer Mill, or for use with any Gehl No. 41 Mill you may now own. With transport truck, which is optional, you can store mill where convenient . . . or hitch to tractor and go anywhere to grind.

THERE'S NOTHING BETTER THAN A GEHL!

Commemorating

SUCCESSFUL FARMING'S

50th ANNIVERSARY

of service to the farm families of the nation. 1902-1952

NEW FARM HORIZONS

A challenging new book by the editors of Successful Farming magazine

The purpose of this book is to help you understand the progress agriculture has made and will continue to make—and what it means to the farmer and to our nation as a whole. In 50 years, agriculture has moved *fast* and *far*. It has met the challenge of a rising tide of population, limited land to work, and fewer people on the farm.

But today there are new challenges. *New farm horizons.* New questions on our minds. Is productivity unlimited? Has the mechanical revolution on the farm only just begun? Will the scientist give the farmer even newer methods for bringing food from the soil? Will those who live on our farms continue to increase their living standards? Can agriculture meet the new challenges the future will pose?

These are the kinds of questions the editors of *Successful Farming* examine on the 50th anniversary of a publication which has played and will continue to play its role in farm progress through the communication of information and ideas. The answers are guideposts for the future of vital importance to the farmers of our nation, industry, commerce, and labor alike.

ORDER your 50th Anniversary copy of *New Farm Horizons* simply by writing to *Successful Farming*, 3810 Meredith Building, Des Moines 3, Iowa. Price $3

Veterinary

Fertilizers are dangerous

Not long ago we were on a farm where the cows were eating dirt. Although not uncommon, this case was somewhat unusual because only one corner of a certain field was of interest to the cattle. They had actually eaten a good-sized hole in the ground. The owner wasn't too concerned until one of the cows showed up sick. Then he thought trouble was due to a lack of certain minerals.

However, a little questioning revealed that a sack of nitrate fertilizer had been spilled in that particular spot the previous year. The sick cow evidently had picked up enough of it to poison herself. Cattle will go to unusual lengths in order to eat this dangerous material, so keep it away from them. Cattle are too valuable to lose needlessly.

Tumors made walking hard

The growths between the hoofs shown in the picture below are a form of skin tumor which resembles warts in some respects. Although seen here on a young dairy cow, the growths are more commonly found on the feet of beef cattle running in feedlots. They are usually considered as harmless, although they may become infected and grow so large that the pain will cause difficulty in walking. Surgical removal represents the most practical form of treatment with little danger of recurrence.

Photographs: Bailey

It wasn't a new disease

Recently an owner told us that great numbers of his pigs were dying with what he was sure must be one of the new swine diseases. An investigation showed he was wrong. The trouble turned out to be poisoning due to feeding too much cottonseed meal. This shouldn't happen, for authorities have always warned against feeding swine a ration containing more than 9 percent cottonseed. Trouble from such feeding is likely to result if pigs aren't supplied with green pasture, good alfalfa hay, or plenty of grain along with large amounts of cottonseed.

Watch those sows!

Every once in a while we see a litter in which two or three pigs are sick and weak while the litter mates appear fat and healthy. Often the weaklings have been that way since birth, while at other times they did all right for a while and then started going downhill.

In a great many of these cases, the sow has gone partially or completely dry in some of her teats and the weak pigs are simply starving to death. Under these conditions, the pigs often can be saved if they're taken away from the sow and raised as orphans.

What's the trouble here?

One of these calves was first noticed as having scattered bald spots on its head and face. As time went on, these became larger and covered with a thick, gray crust. The condition became progressively worse, and soon appeared on the neck, shoulders, and other parts of the body. The lesions appeared to be itchy, and the calf rubbed and scratched until the skin thickened in places and bleeding frequently occurred. The condition was evidently contagious, too, for the other calf in the pen was soon affected in a similar fashion. Such symptoms can be caused by mange, lice, ringworm, allergies, X-disease, and assorted skin disorders. What's the trouble here?

What caused bald spots on calves' heads?

In this case it happened to be ringworm, a highly contagious disease caused by a moldlike fungus called *Trichophyton tonsurans*. It is most common in calves, as older animals usually have considerable resistance. The disease also can be transmitted to human beings, so care must be taken at all times when infected stock is handled.

The fungus is easily killed and several different remedies are effective against it. Treatment begins with the isolation of infected animals to prevent further spread. After that, the dry crusts and scabs should be scrubbed off with warm water and mild soap to expose the underlying fungus. This gives remedies a chance to come in contact with it. Tincture of iodine is effective when applied for a few days, and so is tincture of phemerol, along with many other preparations. Pens which have held infected animals should be thoroughly disinfected before being used again. This will help to prevent expensive losses.

Is there anything for it?

You bet there is! Wonderful safe, sure Sergeant's Dog Care Products! Famous for helping keep dogs healthy and happy. There's one for practically every need. Worms, for example, clear out quickly and surely with **SURE SHOT** (for big dogs) and Puppy Capsules (for small dogs). Other products for fleas, lack of vitamins, skin irritation, ear ailments. All veterinarian-certified. Relied on by dog owners for 77 years. **FREE.** Your dog care problems are answered by authorities in Sergeant's Dog Book. At drug or pet counters—or write Sergeant's, Dept. K-10, Richmond 20, Virginia.

Sergeant's® dog care products

MAKE FARM PAINTING EASY

FREE BOOK TELLS HOW to get better paint results at no extra cost. Given free by America's leading aluminum producer so you can get full value and satisfaction from aluminum paint. Written by experts, packed with facts. Write for, "Paint it Bright."

ALUMINUM COMPANY OF AMERICA • 1715K Gulf Bldg., Pittsburgh 19, Pa.

DRAINS Cellars, Cisterns, Wash Trays; IRRIGATES Your Garden, etc.

ORIGINAL "Type P" Pump has 1 HP rust-proof seal, brass, garden hose. Pumps 200 GPH, 300 GPH 25 ft. high, or 1500 GPH from 25 well. Uses any 1/2 to 1 HP motor. 1" intake, 3/4" outlet. Motor mounting included.

DOES NOT CLOG!

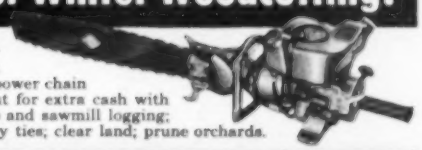
Postpaid if cash with order. (Most of Mfrs. sold this Money Back Guarantee)

Also Gear Pumps in all sizes.

LABAWCO PUMPS $6.95

Belle Mead 33, N. J.

Get Ready For Winter Woodcutting!



Cut more wood this winter with a TITAN—the fastest cutting, easiest operating power chain saw you'll ever handle. Cut for extra cash with TITAN—fell trees for pulp and sawmill logging; cut firewood, posts, railway ties; clear land; prune orchards.

Get a *TITAN* now!

TITAN has power to spare to make any woodcutting job easy. Lightweight—motor weighs only 30 lbs. Versatile—one and two-man use; 18" to 60" blade, bars or 19" bow. Efficient—swivels to cut from any angle; automatic clutch; self-winding starter; dustproof, waterproof magneto; grouped controls.

Send For Free Folder Now!

TITAN CHAIN SAWS

TITAN CHAIN SAWS, INC.
2715 4th Avenue South, Seattle 4, Washington

Name _____

Address _____

City _____ State _____

DEALER INQUIRIES INVITED

251 SONGS Your RADIO FAVORITES

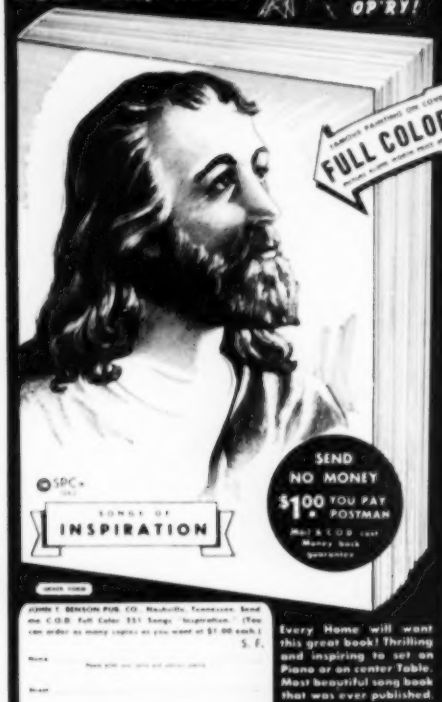
Now The Songs You've Always Wanted

HEARD ON SAT. NITE OP'RY!

GOSPEL & SPIRITUALS

★ Words and Music Complete ★

FULL COLOR BOOK • SONGS THAT ARE SUNG AND PLAYED BY YOUR FAVORITE SINGERS IN THIS BOOK YOURS TO LOVE AND KEEP.



YOU GET 251 SONGS AT LESS THAN ½c EACH

These 55 Songs you get PLUS 196 OTHERS

1. Angels, get My Mansion Ready
2. Blessed Jesus Loves you, too
3. Farther Along
4. Hallelujah! W. Shall Rise
5. He Whispers Sweet Peace to Me
6. Hide Me, Rock of Ages
7. Hide Thou Me
8. Held to God's Unchanging Hand
9. How Beautiful Heaven Must Be
10. I am Finding Glory
11. I Can Tell You the Time
12. I'd Rather be an Old Time Christian
13. I'd Rather Have Jesus
14. I Dreamed I Searched Heaven for You
15. If I could Hear Mother Pray again
16. If We Never Meet Again
17. I'll be a Friend to Jesus
18. I'll Fly Away
19. I'll Make it My Home
20. I'll Meet You in the Morning
21. I'm Free Again
22. I'm On the Battlefield for My Lord
23. Is There anybody here that Never Knew Him?
24. I've Got that Old Time Religion in My Heart
25. I Want that Kind of Blessing
26. I Want to Know More about My Lord
27. Jesus Brings Sweet Joy to Me
28. Jesus Held My Hand
29. Jesus, I'll Follow Thee Through
30. Just a Closer Walk with Thee
31. Just a Little Talk with Jesus
32. Just Over in the Glory Land
33. Keep on the Firing Line
34. Kneel at the Cross
35. Lead me to the Rock
36. Looking for a City
37. Lord Build Me a Cabin in Glory
38. Lord, Lead me On
39. O Happy Day (Southern Quartet Arranged)
40. Precious Memories
41. Shake Hands with Mother Again
42. Take my Hand, Precious Lord
43. Talk it over with Jesus
44. The Name Coming Week
45. The Old Gospel Ship
46. This World is not My Home
47. Victory in Jesus
48. Way down Deep in my Soul
49. We'll Soon be done with Troubles and Trials
50. We Will rise and shine
51. When God Digs His Love in my Heart
52. When He calls I'll Fly away
53. When the Saints Go Marching In
54. When the Saviour reached down for me
55. Where Could I Go

REMEMBER YOU GET 196 OTHER SONGS

SEND NO MONEY $1.00 YOU PAY POSTMAN

Mail C.O.D. (or) Money Back guarantee

JOHN T. BENSON PUB. CO. Nashville, Tennessee. Send me C.O.D. Full Color 251 Songs "Inspiration." (You can order as many copies as you want at $1.00 each.) S. F.

Name

Street

City State

Every Home will want this great book! Thrilling and inspiring to set on Piano or on center Table. Most beautiful song book that was ever published.

★ JOHN T. BENSON PUBLISHING CO. Nashville, Tenn. ★

Enjoy better farm living . . .

. . . by letting *Successful Farming* continue to help you solve all your farm problems.

Windsor Rocker—hand bent back saddle seat. About $23

Duncan Phyfe—hand carved back striped slip seat. About $18.

You'll enjoy a lifetime of pride in owning

TELL CITY CHAIRS

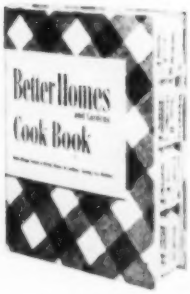
The world's biggest selection of chair patterns. At all better stores.

FREE DECORATOR BOOK Write Dept. S for your copy!

TELL CITY CHAIR CO., TELL CITY, IND.

Better Homes & Gardens

Cook Book



For fall . . . a big complete section on food canning and freezing. Hundreds of recipes. All taste-tested in *Better Homes & Gardens* kitchens. $2.95

BINOCULARS

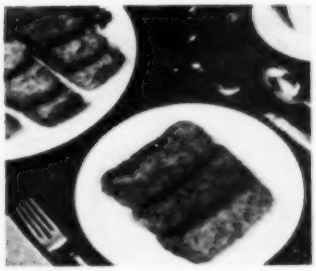
Made in Germany

Precision ground lenses, center focusing gives exact eye adjustment. Large 42MM objective lens. Wide range, partial omnifocal adjustment. Weight 10 oz. Fits wide field of view. $3.95 postpaid

Satisfaction guaranteed or money promptly refunded. Send check or money order Dept. SF-115.

Criterion Co., 331 Church St., Hartford 3, Conn.

Meat—for a hearty beginning



Hearty pork sausage combines with corn meal to make this Crusty Scrapple

Meat for breakfast is the fluting on the nutritional pie. It's not essential, but it adds a lot. You know by now that the basic breakfast pattern includes fruit, cereal, bread, and milk, with an egg at least four days a week. You know, too, that the ideal breakfast will provide one-fourth to one-third of the calories, vitamins, minerals, and protein you need every day. That's a man-sized meal.

But why add meat to an already adequate breakfast? For one thing, the aroma of frying bacon is enough in itself to bring the family to the table with sharpened appetites. Vary the meat, and you'll have the family eagerly looking forward to each day's breakfast.

Nutritionally, a serving of meat for breakfast will take care of a goodly share of the day's requirements for the B vitamins, for iron, and for protein. Start right now to give your family the extras that come with meat for breakfast.

Canadian Bacon With Applesauce

Makes 4 servings

Place in baking dish:
8 slices Canadian bacon, ¼ inch thick
Combine **1 cup applesauce**
¼ cup brown sugar
¼ teaspoon ground cloves
Top each bacon slice with 2 tablespoons of the applesauce mixture.
Bake at 350° (moderate) for 20 to 30 minutes.

Sausage-Pineapple Team

Makes 4 servings

Brown **½ pound pork sausage,** shaped into 4 patties
Add **2 tablespoons water**
Cover and steam for 8 minutes.
Remove patties.
Pour off all but 2 tablespoons drippings.
Add to drippings in skillet:
2 tablespoons flour
Brown.
Add **1½ cups crushed pineapple,** undrained
Heat thoroughly.
Serve on **toast tips** with pork patties.

Minced Ham 'n' Eggs

Makes 4 servings

Fit into 4 muffin cups:
4 slices minced ham
Break into each cup:
1 egg
Season each egg with:
salt, pepper, and **paprika**
Bake at 350° (moderate) until eggs are set, about 25 to 30 minutes.

Crusty Scrapple

Makes 6 servings

Brown **1 pound pork sausage**
Drain well.
Combine **1 14½-ounce can evaporated milk**
1½ cups water
Add 2½ cups milk mixture to sausage.
Reserve remaining milk mixture to dip scrapple.
Heat sausage mixture to boiling.
Stir in **½ cup yellow corn meal**
¼ teaspoon salt
⅛ teaspoon pepper
Cook 5 minutes, stirring constantly.
Pour into 9½x5¼x2¾-inch loaf pan.
Chill until firm, overnight if possible.
Unmold.
Slice in ½-inch slices.
Dip slices in:
1 cup crushed corn flakes
Dip again in remaining milk mixture, then again in corn flakes.
Brown in ⅛ **inch hot fat** on both sides.

Ham-and-Egg Cutlets

Makes 6 servings

Melt **¼ cup butter** or **margarine**
Add **5 tablespoons flour**
Blend until smooth.
Add **1 cup milk**
Stir constantly until mixture thickens.
Add **1 tablespoon grated onion**
2 tablespoons chopped parsley
¾ teaspoon salt
few grains pepper
1½ cups ground ham
4 hard-cooked eggs, ground
½ cup coarse cracker crumbs
¼ teaspoon Worcestershire sauce
Put mixture in 8x1½-inch round cake pan.
Cool until firm, overnight if possible.
Cut in wedges.
Roll wedges in:
1 cup cracker meal or **fine cracker crumbs**
Dip in **2 eggs,** slightly beaten
Roll again in cracker meal.
Fry in deep fat (390°) until golden brown.

Breaded Brains

Makes 4 servings

Wash **2 pounds calves' brains**
Cover with cold water and boil about 5 minutes.
Remove brains; peel off outer tissues.
Cut into 3-inch serving pieces.
Combine **1 cup bread crumbs**
1 tablespoon chopped parsley
1 tablespoon Parmesan cheese
½ teaspoon salt
⅛ teaspoon pepper
Roll brains in bread-crumb mixture.
Fry in **½ cup hot salad oil,** about 5 minutes, or until brown on both sides. **END**

TOWELS
12 Large Size Assorted Colors ONLY **$1.00**
Money Back Guarantee. Order Now!
Murray Hill House, Dept. FM
157 East 31st St., New York 16, N.Y.
Dealers' Inquiries Invited

MAKE MONEY EASY
GET PERSONAL DRESSES
Show Gorgeous New Styles Actual Sample Fabrics

Women! Here's a wonderful opportunity to use your spare time to make money to spend, and to get lovely dresses to wear! Just show your friends and neighbors exciting newest-style dresses, and lingerie, hosiery, children's wear, men's shirts, socks, etc., and take orders at amazingly low prices—with big profit for you. NO MONEY—NO EXPERIENCE NEEDED. You can even get personal dresses WITHOUT PAYING ONE CENT FOR THEM.
Rush Name for SAMPLES!
SEND NO MONEY—We send you big package of ACTUAL SAMPLE fabrics and complete, colorful style-presentation—all absolutely FREE—with complete instructions and money-making plans. Write today.
THE MELVILLE COMPANY
Dept. 7537 Cincinnati 28, Ohio

Enjoy better farm living . . .
. . . by letting *Successful Farming* continue to help you solve all your farm problems.

LIFETIME WRITTEN GUARANTEE
BENRUS 15 & 17 JEWEL MOVEMENT
Originally Up to $59.50
Official SHOCKPROOF WATCH OF FAMOUS AIRLINES. Choice of MEN'S OR LADIES'
Your Choice ONLY $16.95 Plus $1.70 tax

In latest style Yellow Gold Cases. You get these unredeemed lifetime guaranteed quality FAMOUS BENRUS WATCHES now at only $16.95 because we bought out SURPLUS STOCKS of leading New York and Maryland jewelers. Order now. Order more or no order.
TRIAL OFFER! WEAR AT OUR RISK! Money back in 10 days if not delighted. SEND ONLY $1 with order. Pay balance C.O.D. plus postage. Or we pay postage if you enclose $16.95 plus $1.70 tax.
FREE! Handsome economic band included with prepaid orders. Order now.

Lifetime Guaranteed 11 JEWEL SWISS WRIST WATCH
Worn by Army Navy & Marines
Originally $60 $14.95 Plus $1.50 tax
New Encabloch Shock Protected WATER-DUST PROOF

MARYLAND DISTRIBUTORS
501 E. Baltimore St., Dept. 411, Baltimore 2, Md.
Free Watch and Diamond Ring Catalog
Practically Wholesale Prices to Your Door

Farmer's Trading Center

Advertisements using illustration or display (large) type, $6.35 per agate line. This classification is open to baby chick, poultry, livestock, pet stock, and schools. Straight classified (no illustration or display type)—20 word minimum—all classifications—60 cents a word. Write Successful Farming, Des Moines 3, Iowa.

LIVESTOCK

Registered and Non-Registered Wisconsin Holstein Calves—for higher production herds. Exceptional offering of choice Wisconsin Holstein Calves. Available in large quantities. Also some Guernsey and Brown Swiss. Vaccinated against shipping fever. Health sheet furnished. Well started—no milk required. Visitors welcome. Write or Telephone J. M. McFarland & Sons, Watertown, Wisconsin.

Guernsey and Holstein Heifer Calves. Good, strong, carefully selected Guernsey or Holstein heifer calves, purebred, not subject to registry, $60 FOB, express car. Older calves higher, according to age. 10 to 15 delivered by truck on approval. Also a few Brown Swiss calves.
H. R. Lobdell, Mukwonago, Wis.

Blue Ribbon Holstein heifers from Wisconsin's biggest and oldest dealer. Guaranteed and selected from proven Wisconsin herds—No Stock Yard Culls! Vaccinated for shipping fever. T. B. and Bangs tested. Health sheets and buyer references furnished. Special Offer! Walter Lehmann, Dept. 7, Box 53, Watertown, Wisconsin.

Free 114 page Veterinary Guide. Describes 95 farm animal diseases, newest sulfas, penicillin, etc. If no Peters dealer near you, write Peters Serum Laboratories, 8150 McGee, Kansas City, Mo. (Peters family, world's first hog serum manufacturers.)

Powdered Phenothiazine: Plain (100.00%). Drench (99.00%): 150 pounds, $92.95. Fifty, $34.95. Twenty-five, $20.49. Ten, $9.49. Five, $4.95. Prepaid. Guaranteed. Attractive prices larger quantities and Phenothiazine-Lead Arsenate Drench. Southside Chemical Company, Petersburg 5, Virginia.

Berkshire hogs increase New Profit. Leading meat-type breed, best foragers, prolific. Write for magazine, literature and list of nearby breeders. American Berkshire Association, 601H West Monroe, Springfield, Illinois.

"How to Break and Train Horses"—A book every farmer and horseman should have. It is free; no obligation. Simply address Beery School of Horsemanship, Dept. 2010-C, Pleasant Hill, Ohio.

Highest grade Holstein and Guernsey Heifers also heifer calves, from the Milk Centre of the World.
Jay W. Jones Jr. Harvard, Illinois, R.R. 2.

Use Hampshire sires for big early maturing market-topping lambs. Free breeders list and information. American Hampshire Sheep Association, 72-B Woodland, Detroit 2, Michigan.

Wisconsin Holstein Calves, registered or purebreds. Selected for type and production. Also Guernsey and Brown Swiss. George Piper Farm, Watertown, Wisconsin.

Wisconsin Holstein, Guernsey and Brown Swiss Heifer Calves from High Production Herds. Free literature and prices. Dairyland Cattle Co., Delafield, Wisconsin.

Hereford Hogs will convert grain to pork most economical of any breed. Attractive illustrated circular.
Yalehurst Hereford Farm, Peoria, Ill.

Wisconsin Holstein and Guernsey Heifers and Calves for sale. Delivered on approval. James F. Welch, Mukwonago, Wis. Phone Eagle 778.

Registered Berkshires and Angus Cattle. Improved type. Farmer's prices. Write for details. Owen Stock Farms, Route 5, Spencer, Indiana.

H. R. Lobdell, Mukwonago, Wisconsin offers a choice lot of open yearling Guernsey heifers. Calfhood vaccinated.

BUSINESS OPPORTUNITIES

Fast Growing Florida offers you many profitable opportunities! You benefit from year-round growing season, variety of soils and crops, and excellent local markets—plus happier living in Fabulous Florida's mild climate that's cool in summer, warm in winter. Investigate the farming opportunities in this rapidly growing agricultural state. Write directly to State of Florida, indicating your specific farming interests and requirements, and request your copy of beautifully illustrated booklet: Farm Opportunities in Florida. Get complete information without cost or obligation. Send your inquiry to: State of Florida, 6222A Commission Building, Tallahassee, Florida.

Moneymaking Opportunities. Hundreds to choose from. Read World's Biggest Classified Medium. Free copy. Popular Mechanics Classified, 207 East Ontario, Chicago 11.

FLOWERS — BULBS

Rose Bushes—All best varieties, guaranteed. Free color Catalog showing care and culture. Mct Iung Bros. Rose Nursery, Route 5, Box 275-W, Tyler, Texas.

FARM EQUIPMENT

Tools at wholesale. Direct from factory. Full line of top quality, fully guaranteed, chrome, factory-new mechanics hand tools. You save half regular price. Pay easy monthly terms. Write today for free catalog. Mechanics Co-Op, Dept. M, Oakland 8, California.

Rural Telephones. Modern. Hand-set wall and cradle telephones, standard installation accessories, etc. Immediate delivery. Guaranteed to give clear transmission in town or on long rural lines. Free bulletin! Farm Telephone, Dept. 108, Rogers Park Station, Chicago 26, Illinois.

Complete cornpicker repair parts stocks for Farmrite, General Implement and Sollitter cornpickers. Husking beds and parts for Farmrite, G. I. and Case. Write for Free Catalog and nearest dealer. L. H. Schultz Manufacturing Co., Rochelle, Illinois.

Protect yourself against power line failure with a Katolight AC generator which will provide AC current at 110-220 volts. Available either with engine drive or for tractor drive.
Katolight, Mankato, Minnesota.

Booms All-Purpose Wagon Unloader. Inexpensive, easily attached to your present wagon. Unloads five tons in seven or fourteen minutes. Free literature.
Booms Silo Co., Harbor Beach, Mich.

New Better-Barns Book. Best ways to build, remodel and equip farm buildings. Please enclose dime for mailing cost.
Louden, Dept. SF-140, Fairfield, Iowa.

Free—War Surplus Catalog—Bargains Galore. Welders, Motors, Generators, Hydraulics, Pumps, Kits for assembling your own, other items. Save.
LeJay Company, Minneapolis, Minnesota.

Wire Winder. Roll and unroll barbed wire with tractor power and speed. Low cost. Free literature. Midwest Wire, Dept. 18, South St. Paul, Minnesota.

5 Brands Baler Twine; Binder Twine, Rope—Quality Guaranteed. Wanted Dealers, Distributors, Salesmen. Bob Stone—National Twine Distributors, Chariton, Iowa.

Government Surplus 200 ampere 28 volt DC generators. Use for electric arc welding. $33.00. Free information.
Lewis Short, Burrton, Kansas.

Free Crib Plans. Cup and portable elevator catalog. Built right for future needs. Meyer Mfg. Company, Box 60, Morton, Illinois.

Concrete Blockmaker—Daily capacity 100 blocks. Complete equipment $24.95. Write Jack Sun Manufacturing, Department SF, 1300 East 59th, Kansas City, Missouri.

COONHOUNDS

Hunters—Dogs of the hunting breeds. Coon $25.00, Combination $20.00, Semi-Silent $20.00, Squirrel $15.00, Rabbit $15.00, Fox $25.00. 10 days trial. Write for literature containing terms of sale.
J. N. Ryan Kennel, Murray, Ky.

Coonhounds, Combination Hounds, Foxhounds, Rabbit and Beagle Hounds. A Specialty. Puppies all breeds, price reasonable. Free literature and pictures. Trial. Raccoon Mountain Kennels, Box 268, Albertville, Ala., Dures Thomas, Owner.

Hunters—We offer Coon and Foxhounds, Blueticks, Blacktans, Redbones, Walkers, Beagles, others. Reasonable. Free Literature. Okaw River Kennel, Cowden, Illinois.

Hunting Hounds: Coon and Combination Hounds, Foxhounds and Rabbit hounds. Cheap. Trial. Literature Free.
Dixie Kennels, D4, Herrick, Illinois.

Hunting Hounds: Straight Cooners, Combination Hunters, Foxhounds, Rabbithounds, Redbones, Blacktans, Blueticks, Reasonable. Pictures. Literature free.
Echo Valley Kennels, Herrick, Illinois.

Hunters, we offer coon, combination hounds, fox, squirrel and rabbit hounds. Trial allowed. Information Free.
Hillside Kennels, Sesser, Illinois.

Hunters: Coonhounds, Combination Hunters, Foxhounds, Rabbithounds; Blacktans, Redbones, Blueticks, Spotted. Trained. Reasonable. Literature free. Trial.
Wildwood Kennels, Herrick 17, Illinois.

Classified advertisers know their sales always grow when they advertise in Successful Farming.

DAIRY GOATS

Profit and Health from dairy goats. Monthly magazine tells how. 12-month subscription $1.
Dairy Goat Journal, Columbia, C25, Mo.

Swiss Goats. Produce rich, healthful milk for dairy or home use. Low cost. Safe shipment anywhere.
Peyton Farm, Duluth, Minnesota.

DOGS — PETS

Genuine English Shepherd and Collie pups—guaranteed heeldrivers—(no fooling) year's trial—training instructions—(30,000 satisfied customers) males—females—spayed females—$15.00. (Distemper vaccinated).
Emil Runft, Reinbeck, Iowa.

Creekside Eng. Shepherd pups, $12. Guaranteed heelers, watchdogs, happy guarding the baby. Training instructions. Few older partly trained $25.
Creekside Kennels, Beardsley, Minn.

Setters and Pointers, Fox, Coon, and Rabbit Hounds, shipped for trial. Catalog 10 cents. Stanley Blake, Mgr. Blue Grass Farm Kennels, Berry, Ky.

Genuine English Shepherd pups—(Distemper Vaccinated). Guaranteed Heeldrivers. Year's Trial. Training Instructions. Males. Females, Spayed Females.
Highview Farms, Cedar Falls, Iowa.

"PR" German Shepherd Police Pups. Protect your property with good Watch dogs. Send 25c for Pictures.
H. Schumacher, Ottertail, Minn.

Sportsmen: 200 Pointers, Setters, Straight Cooners, Combination Hunters, Rabbit and Fox Hounds. Reasonable. List Free.
Ramsey Creek Kennels, Ramsey, Illinois.

English Shepherds—Border Collie Puppies. All ages, both sexes, choice colors, faithful workers, satisfaction guaranteed.
Fairmount Farms, Cedar Falls, Iowa.

Want to buy good collie or shepherd puppies. Dept. G. Box 777, Des Moines, Iowa.

FARMS — REAL ESTATE

It's Complete! 120-acre Ozark farm with 6 springs—11 milk cows, 4 heifers, 6 calves, 3 brood sows, boar, team, poultry, machinery, new refrigerator, home furnishings, crops included! Electric-lighted 7-room home, 40-ft. barn, poultry buildings, gravel road, near village. 60 partly-wooded pasture, 37 cultivated, rest meadow, woven wire, 40 bearing fruit trees; money-maker, $9,000, terms. 15-day possession. Big Free Fall catalog many states. United Farm Agency, 2825-SF Main St., Kansas City 8, Mo.

New Strout Catalog Just Out! Farms, Homes, Businesses, 31 States, Coast-to-Coast, bargains galore. Mailed Free. Our 53rd year. World's Largest. Strout Realty, 20 West Ninth St., Kansas City 6, Mo.

Canadian Farm Lands—Improved and Unimproved Lands. Good settlement opportunities on productive soil, reasonably priced. For free information write: Canadian National Railways, Dept. N, Union Station, Winnipeg, Canada.

Farm-Ranch Opportunities. Favorable conditions, Washington, Minnesota, Montana, Idaho, Oregon, North Dakota. Literature, farm descriptions. Specify which state. J. W. Haw, 11 Northern Pacific Ry., St. Paul 1, Minn.

Modern Farm Homes—Prosperous Wisconsin Dairying District—Beautiful Lake Region. $50 Per A. & up! Favorable Terms! Baker AA14, St. Croix Falls, Wis.

New List Farms, Ranches, Homes in town, Auto Courts, Businesses, Country homes in Missouri Ozarks. Johnson Realty-8F, Marshfield, Mo.

STOCKMAN'S SUPPLIES

Horn Weights. 80c per pair postpaid. Made in 4 sizes—½ lb.; 1 lb.; 1½ lb.; and 2 lb. Tattoo markers $4.75 postpaid. Includes set of numbers, bottle of ink, and full directions. We also carry complete line of ear tags, neck chains, veterinary instruments, supplies, serums, remedies, in fact, everything for the stockman. Write for free catalog.
Breeders Supply Co., Council Bluffs, Iowa.

Abortion Mastitis, other diseases. Full details—Free literature. Money-saving prices on Vaccines, Bacterins, Pharmaceuticals. Kansas City Vaccine Co., Dept. K, Kansas City, Mo.

FOR FARMERS

Attention Cream Shippers! Ship us your cream. 57 years of honest, dependable service. Galva Creamery Company, Galva, Illinois and Kansas City, Missouri, Peterson's Creamery, St. Paul, Minnesota.

Saddles—Western, English. Write for catalogue. H. R. Miller Saddle Co., 5904 Prospect, Kansas City, Mo.

Give Successful Farming, and your friends will be reminded of your thoughtfulness each month throughout the year.

OLD GOLD — JEWELRY

Highest Cash Paid For Old, Broken Jewelry, Gold Teeth, Watches, Silverware, Diamonds, Spectacles. Free Information. Satisfaction Guaranteed. Rose Smelting Company, 29-D East Madison, Chicago.

RABBITS

A Practical Beginning To Successful Rabbit Raising. 48 Page Illustrated Booklet. Dime. American Rabbit Breeders Association, 40 AR&CBA Bldg., Pittsburgh, Pa.

Steady Earnings With Angora Rabbits. Free illustrated booklet tells how, lists markets, successful raisers. Angoraville, 170 E. Butler, West St. Paul, Minnesota.

Raise Rabbits, Ready Market, food, fur. Beginners Manual 25c, Journal year $1.00, sample dime. Standard Rabbit Journal, B-241-5, Milton, Pa.

Raise Guinea Pigs. Make extra money at home. Laboratories buying thousands. Good markets available. Free Booklet.
Taylors, B426K, Hapeville, Georgia.

Make Big Money! Raise Chinchilla Rabbits. Profitable Cash Markets Supplied for your protection. Write Today!
Rockhill Ranch, Sellersville 9, Penna.

Earn Up To $400 Monthly raising Angora or New Zealand Rabbits. Plenty markets. Particulars free.
White's Rabbitry, Newark, Ohio.

MISCELLANEOUS

Outdoor Toilets, Cesspools, Septic Tanks cleaned, deodorized with amazing new product. Just mix dry powder with water, pour into toilet. Safe, no poisons. Save digging, pumping costs. Postcard brings free details. Burson Laboratories, Dept. B-22, Chicago 22, Illinois.

Don't Feed Sparrows!!! Make your own trap and catch thousands. Save costly feed and annoyance. Free details. Roy Vail, Farm Service Co., Box 7921, Chicago 1, Illinois.

Cesspools, Septic tanks, Outdoor toilets—Cleaned-Deodorized. Amazing Product Saves Digging. Details. DigNoMore Company, Dept 24, 2611 Harriet, Minneapolis 8, Minn.

Raised-Letter Printing—wedding invitations and announcements, sample box with price list free. Fast service.
Allen B. Romig, Mertztown, Penna.

Ammunition—American, foreign and obsolete. New guns. Dime for list.
Central Sports, Delphos 3, Ohio.

EDUCATION

Oil Coloring photographs can be a fascinating hobby or profitable sideline for those with artistic talent. Learn at home. Easy simplified method. Send for free booklet. National Photo Coloring School, 835 Diversey Parkway, Dept. 1557, Chicago 14.

Practical Nursing—Learn easily at Home Spare Time. Big demand, good earnings. High School not necessary. Write for free facts. Wayne School, Dept. EB-13, 2525 Sheffield, Chicago 14, Ill.

Complete Your High School at home in spare time with 55-year-old school. Texts furnished. No classes. Diploma. Information booklet free. American School, Dept. X-730, Drexel at 58th, Chicago 37, Ill.

High School-No Classes. Study at home. Spare Time. Diploma awarded. Write for Free Catalog HAO-19. Wayne School, 2527 N. Sheffield, Chicago 14, Ill.

SALESMEN WANTED

Look Here! Wanted—Men to start in business on credit. Sell some 200 farm-home Products. Thousands our Dealers now make quick sales, big profits. For particulars write Rawleigh's, Dept. J-192-SHW, Freeport, Ill.

Men—Make Top Money Calling on Business Firms. Sell exclusive line business, professional Christmas Greeting Letters. Best season starting. Free Outfit. Success, Dept. N-100, 158 W. Magnolia, Ft. Worth, Texas.

STAMPS

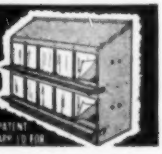
Canadian Collection Free—Includes early Victorian Issues—Jubilees—High Values—Commemoratives—Special Issues—Newfoundlands—Pictorials, etc., etc., together with Philatopic Magazine all free. Send 5c postage. Empire Stamp Co., Dept. SC, Toronto, Canada.

TRACTOR—AUTO PARTS

1953 Edition. It's New! It's Different! Get world's largest Auto Accessory & Parts Catalog and save money. 100 pages. Over 50,000 items, including Hollywood Accessories, Hi-Speed Equipment, Rebuilt Engines, all parts and accessories for all cars and trucks. We have that Hard-To-Get part! Jam packed with bargains. Completely illustrated. Send 25c (refundable). J. C. Whitney, 1919-AA Archer, Chicago 16.

Write for big, free 1952 catalog; tremendous savings. Satisfaction guaranteed. Central Tractor Parts Co., Des Moines 3, Iowa.

USE ROLL-AWAY NESTS!
Get Clean, Grade A Eggs Without Washing
For information write to
HANSEN'S PROCESSES, Inc.
1720 Greendale Ave., Park Ridge, Ill.
Community Type $29.50
10-Hole Individual $37.50
Plus freight (Knocked Down)
Galvanized Sheet Metal



SEND FOR THIS FREE!
Make money. Know how to break and train horses. *Write today for this book FREE,* together with special offer of a course in Animal Breeding. If you are interested in Gaiting and Riding the saddle horse, check here ( ) *Do it today—now.*
BEERY SCHOOL OF HORSEMANSHIP
Dept. 2010-D Pleasant Hill, Ohio

Farmer's Trading Center

Advertisements using illustration or display (large) type, $6.35 per agate line. This classification is open to baby chick, poultry, livestock, pet stock, and schools. Straight classified, (no illustration or display type)—20 word minimum—all classifications—80 cents a word. Write Successful Farming, Des Moines 3, Iowa.

PATENTS

Inventors: Learn how to protect your invention. "Patent Guide" containing detailed information concerning patent protection and procedure together with "Record of Invention" form will be forwarded upon request—without obligation. We are registered to practice before the U.S. Patent Office and prepared to serve you in handling your patent matters. Clarence A. O'Brien & Harvey Jacobson, Registered Patent Attorneys, 230-K District National Building, Washington, D.C.

Inventors—If you believe you have an invention, you should find out how to protect it. Send for copy of our Patent Booklet "How to Protect Your Invention" and "Invention Record" form. No obligation. McMorrow, Berman & Davidson, Registered Patent Attorneys, 115-D Victor Building, Washington 1, D. C.

Inventors: When you are satisfied that you have invented something of value write me, without obligation, for information as to what steps you should take to secure a Patent. Write Patrick D. Beavers Registered Patent Atty., 950 Columbian Bldg., Washington 1, D. C.

Inventors—Send for Free Patent Information Book and Inventor's Record. Registered Patent Attorney. Associate Examiner, Patent Office 1922-29. Patent Attorney & Advisor, Navy Department 1930-47. Gustave Miller, 1029F Warner Building, Washington 4, D. C.

Inventors: Without obligation, write for information explaining the steps you should take to secure a Patent on your invention. John N. Randolph, Registered Patent Attorney, 237 Columbian Bldg., Washington 1, D. C.

POULTRY — CHICKS— DUCKS — EQUIPMENT

Assorted Heavies $6.98—100. Positively No Leghorns! No Cripples! No Culls! Send Check of Money Order. Prompt shipment. Live Delivery. Chick Brokers—Our 26th year.
Atlas Chick Co., Dept. 8, St. Louis, Mo.

Rocks, Reds, Hampshires, Wyandottes, $8.95; pullets, $12.95. Leghorns, Austra-whites, Minorcas, $8.95; pullets $14.95; Heavy Assorted, $6.95. Leftover, $4.85. Fryers, $3.95. FOB 100%, alive COD. Catalog free.
Bush Hatchery, Clinton, Missouri.

Raise pheasants on the $100 week plan. Little capital and space can make you independent. Free details. Great Central Game Management System, Columbus 8, Kansas.

Baby Chicks $6.85—100 COD. Reds, Rocks, Hampshires & Heavy Assorted. As hatched. No Leghorns. Price at Hatchery. Surplus Chick Co., Milesburg 11, Pa.

White African Guineas. Young Breeders. More Delicious Than Pheasants. Live Delivery Guaranteed. Rocky Mt. Game & Guinea Farm, Brigham, Utah.

Clover Valley Chicks. U. S. Approved-Pullorum Passed. Thousands weekly. All leading breeds. Free Catalog. Clover Valley Hatcheries, Box 39, Ramsey, Indiana.

Renew at least six weeks before your present subscription expires.

SCHOOLS

Be An Auctioneer! Term November 3. Free catalog. Expert instructors. Guarantee results. American Institute of Auctioneering, 809 6th Ave., Des Moines, Iowa.

Learn Auctioneering America's Leading Auctioneers Teach you. Terms Soon. Free Catalog. Reisch Auction School, Box 850, Mason City, Iowa.

Be an Auctioneer. Terms soon. Write for free catalog. Missouri Auction School, Dept. 17, 3241 Paseo, Kansas City, Missouri.

AGENTS WANTED

Make Extra Money—for yourself, club or church. Up to 100% profit selling big value Christmas, All-Occasion greeting card assortments to friends, others. 7 leading 21 card $1.00 boxes. Religious and Novel cards. Gift Wrappings, Ribbons, Stationery, Napkins, Animated Books, Sewing Kits, unusual Gifts. Over 150 items. Bonus plan. Experience unnecessary. Write for Samples on approval. Special Offers. Hedenkamp, 361 Broadway, Dept. SU-19, New York.

Women! Men! Make extra money in your spare time. No house-to-house canvassing required. New Car given as bonus. Amazing nylons guaranteed as long as 9 months depending on quantity, against runs, snags, holes, or replaced free. Rush name and hose size for simple money making plan. Lowell Wilkin, 1210 Wash., Greenfield, Ohio.

Brand New! Amazingly different and smart Christmas Cards bring you Big Money! Take Easy Orders Fast! Pays up to 100% Cash Profit. With Name 50 for $1.25. Big line. Sensational Glo-In-The-Dark Ornaments, Personalized Stationery, Matches. Several $1.00 Boxes on Approval. Imprints Free. North Star, 31 Glenwood, Dept. 9-E, Minneapolis, Minn.

$200 Weekly. New invention. Amazing 4-second Presto Emergency tire chains, fit all modern auto wheels. National advertising building big demand. 3 sales daily to oil stations, dealers, etc., make $200 or more weekly. Territory going fast. Write Presto Chain Co., Dept. P-17, Des Moines 2, Iowa.

Christmas Card Sensations! Sell beautiful Embossed Cards With Name, $1 per box. Quick profits to 100% on fast-selling $1 assortments, big line. Experience unnecessary. Get Free Personalized Samples, Assortments on approval. Stuart Greetings, 325 W. Randolph, Dept. 886, Chicago 6.

Man To Earn $90 Week UP. Long needed invention. Advertised Post, Colliers, Country Gentleman. Prospects everywhere. Full or part time. Exclusive. No investment. Free samples. Write Red Comet, Inc., Dept. 40-C, Littleton, Colorado.

Absolutely Free! Big package actual sample fabrics and style presentation of dresses, lingerie, hosiery, etc. Take orders. Commissions big. Send no money, Melville Co., Dept. 7562, Cincinnati 25, Ohio.

"Fog-Stop" Windshield Cloth. Instantly removes blurry Mist, Frost, Sleet, Snow. Stops windshield fogging. Samples for Agents. Kristee 153, Akron, Ohio.

Sell New Automatic Floor Waxer. Retails $2.95. Profit 125%. Write for Guaranteed Sales Plan.
Smith Corp., Greenfield 10, Mass.

New Plastic Mending Tape. Just press on! Repairs clothing instantly. Lightning seller. Samples for Agents.
Kristee 152, Akron, Ohio.

FARM SEEDS AND NURSERY STOCK

Strawberry Plants—Fall shipment—50 Superfection Everbearing or 150 Giant Robinson $2.00, both for $3.75. Gem, Streamliner Everbearing 100—$2.25. Dunlap, Temple, Blakemore, Premier, Fairland 100—$1.25, 500—$6.00, 1000—$11.00. 15 Concord Grape $1.50. 20 Mammouth Rhubarb or 50 Asparagus $1.25. 25 Latham or Chief Raspberry $2.25. Rider Nurseries, Farmington, Iowa.

Free Catalog! New varieties seed grains. Gateway Seeds, Box 1742-D, Fargo, N. Dak. We need additional local representatives. Write for details.

Give Successful Farming, and your friends will be reminded of your thoughtfulness each month throughout the year.

FILM FINISHING

Free! Sample Photo Christmas Card made from your negative (Limited one to a customer). Send negative and 3c stamp. Special offer—20 Photo Christmas Cards with envelopes, $1.00 plus 10c postage. Negative made from any snapshot or Photo 50c. Film developed—8 exposure roll—jumbo size prints all dated on front margin 35c; 12 exposure roll 45c; 16 exposure roll 60c. Overnight service. Free mailers. Free coupons. Kleer-Vue Film Service, Box 5453-K, Philadelphia 43, Pa.

Personal Photographic Christmas Greeting Cards from your own favorite negatives with appropriate sentiment. Send your negative and 10c for sample card or ten for $1.00, 25 for $2.00. Circular free. Moen Photo Service, 453 Moen Bldg., LaCrosse, Wis.

Two "Everbrite" prints from each negative on 8 exposure film, including coupon for choice of two plain or one colored framed enlargement, 37c. Reprints 3c each. Flash Foto Finishers, Box 1122-R, Minneapolis, Minn.

Fast-Same Day Service! 8 oversized prints in attractive Plastic-Bound book only 35c. 12-50c. 16-60c. Satisfaction guaranteed. Free Exposure Guide with first order.
PicSure, Box 895-M, Philadelphia 5, Pa.

Prompt Service. Finest Quality . . . Two prints (deckle-edge) from eight exposure roll 35c. Reprints 3c each. For clear sparkling prints (Trial Offer) send to Welch Photo Co., 2418-28 Penn North, Minneapolis, Minnesota.

Free Sample Personalized Christmas Photo Greetings made from your favorite snapshot. Send negative and 10c in coin to cover postage and handling costs. Ball Studio, Dept. 10Z, Box 275, St. Louis, Mo.

Two Sets of "Deckledge" Prints with every eight exposure roll finished—40c. Very finest quality. "Deckledge" reprints 3c each. Jumbo reprints 4c each. Brown Photo Company, 1910-45 Emerson, Minneapolis, Minnesota.

Only 25c for 8 beautiful enlarged prints from your roll or negatives. (Trial Offer). 16-50c. Quick Service. Money-back guarantee. Willard Studios, Box 3535N, Cleveland, Ohio.

Two beautiful prints from each picture on 8 exposure roll 35c. Thirty-one years of satisfied customers. Quick Service. Lens Photos, Dept. C-10, Janesville, Wis.

Look—16 contact oversize prints, or 8 jumbos in album 35c. Coupon for 3—5x7 enlargements.
Owlphoto Co., Weatherford, Okla.

16 Prints or 8 Jumbos from roll or negatives, 25c with this ad. I. Skrudland, Box 486, Daytona Beach, Florida.

Beautiful enlargement from each picture on 8 exposure roll 35c. Cut Rate Photos, Dept. K-1, Janesville, Wisconsin.

16 Jumbo Prints from any size roll or negatives 35c, with this ad.
E. Skrudland, Lake Geneva, Wisc.

Boost your mail order business with a classified advertisement in Successful Farming.

EMPLOYMENT

Your Personal Lingerie free as bonus—extra cash besides—introducing sensational Curve-Tailored idea to friends. Outfit Free. World's-Star, Dept. G-13, Grand Rapids, Michigan.

Sell finest nylon hosiery Guaranteed against everything, snags, runs, holes. Demonstration kit Free to you with actual sample stocking. American Mills, Dept. 399, Indianapolis.

Make Money Introducing World's cutest children's dresses. Big selection adorable styles. Low prices. Complete display free. Rush name.
Harford, Dept. H-3341, Cincinnati 25, O.

FOR FARM WOMEN

Embroider Stamped Linens. Buy direct from manufacturer and save. Free 28-page catalog featuring designs for cutwork, applique, cross-stitch, crochet, etc.—stamped on Seamless Tubing Pillow Cases, Scarfs, Luncheon Sets, Banquet Cloths, Show Towels, Baby Articles, etc. Write: Merribee, Dept. 896, 22 West 21st St., New York 10, N. Y.

Leathercraft. Everything needed by beginners, advanced hobbyists and professional leatherworkers. Largest stock of supplies in U.S. Moderate-priced tooling leathers, top quality calfskins, tools, supplies, kits. Send 10c for Big Catalog. J. C. Larson Co., 820 S. Tripp, Dept. 2362, Chicago 24.

Outdoor Toilets, Cesspools, Septic Tanks cleaned, deodorized with amazing new product. Just mix dry powder with water, pour into toilet. Safe, no poisons. Save digging, pumping costs. Postcard brings free details. Burson Laboratories, Dept. B-23, Chicago 22, Illinois.

Custom Wool Carding. Knitting yarns, Blankets, Socks, Mittens. Batting from your own wool. Have your worn out woolen materials made into excellent comforter batting. Write Cambridge Woolen Mills, Cambridge, Minnesota.

Women Needed—We offer wonderful opportunity for spare time money. Your home is your headquarters. No selling or canvassing. Write for free information.
Wilson Ties, Stillwater 2A, Minnesota.

Good money in weaving. Weave rugs at home for neighbors on $59.50 Union Loom. 30,000 doing it. Booklet free.
Union Looms, 80 Post St., Boonville, N.Y.

Look Full fashioned nylon Mill rejects, 6 pr. $1. Imperfects 3 pr. $1. Select Imperfects, 3 pr. $2. Satisfaction guaranteed. Premier Sales, Box 8177, Chattanooga, Tenn.

89 Full size Jig Saw patterns of beautiful shelves, ornaments, toys, novelties. Plus "How, Where to Sell". Only $1.00. Mastercraft 104A, 7041 Olcott, Chicago 31, Ill.

Make Up To $45.-$55. Week as a Trained Practical Nurse! Learn quickly at home. Booklet free. Chicago School of Nursing, Dept. F-9, Chicago.

Ceramics. How to make and sell Pottery fully explained in "Ceramics For Fun and Profit". Only $1.00. Ceramic Specialties, Box 2126, Artesia, Calif.

Church Groups—Raise Funds Easily!! Complete credit. Free catalogue. Over 50 useful, unusual moneymakers. Try us! BLB Products, Dept. SF, Oneonta, New York.

Corsage Making Materials. Instruction Books. Artificial Flower Parts, stamens, wood fiber. House Plant Helps. Free Catalog. Floral Art, Dept. SF-10, Teaneck, New Jersey.

90 All new, full size lawn ornament and novelty patterns up to 20" high. Only $1.00. Mastercraft 102A, 7041 Olcott, Chicago 31, Illinois.

Money in new greaseless doughnuts. Start in kitchen. Wholesale to stores. Free plans. Unit Ray Co., 3605 South 15th Ave., Minneapolis 7, Minn.

Thrilling, Profitable Home Business. Make fast-seller chenille monkey trees, dolls, flowers. Terrific holiday demand. Information free. Velva, Bohemia 23, N.Y.

FEATHERS WANTED

Guaranteed top prices and immediate payment for feather shipments. Free tags. Ship to this old reliable firm. Used feathers—send sample for best price. No handling or commission charge. Progress Feather Co., 657 W. Lake St., Chicago, Ill.

Top Price for new goose & duck feathers. Ship parcel post. For old feathers mail sample in ordinary envelope to: Northwestern Feather Co., 212 Scribner, Grand Rapids 4, Mich.

Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 135. Visit store nearest you for help with decorating problems.

THE NAME "HY-LINE" is a registered trademark. Hy-Line refers only to the chicks hatched from parent stock developed by Pioneer Hi-Bred Corn Company. Over 150 authorized hatcheries throughout the United States and Canada hatch and distribute Hy-Line Chicks.

On The Average...

100 HY-LINES LAY AS MANY EGGS AS 127 OTHER CHICKENS

That's the egg producing advantage of Hy-Lines over other chickens . . . proven in divided flock tests by 417 farmers. In 11½ months, these farmers gathered an average of 190.2 eggs per Hy-Line layer housed, compared to only 149.3 from their other chickens. This means that *100* Hy-Lines produced as many eggs as *127* standard-breds and crossbreds . . . decisive proof of Hy-Lines' greater profit-making advantage.

HY-LINES REDUCE FEED COST $1.69 to $2.39 Per Case of Eggs

In feed utilization, 53 farmers reported: Hy-Lines averaged 37½ to 53 lbs. less feed per case of eggs than their other chickens. At 4½c per lb. average for grain and mash, Hy-Lines' feed cost per case was $1.69 to $2.39 less.

SEND FOR COMPLETE REPORT of these On-The-Farm Tests. We invite your inquiry. Free catalog.

HY-LINE POULTRY FARMS
A Department of Pioneer Hi-Bred Corn Company
1204 MULBERRY STREET, DES MOINES 9, IOWA

FREE BOOK on INFRA-RED BROODING

Also contains descriptions and prices (as low as $3.50) on all sizes and kinds of fixtures for flocks from 75 to 10,000—fixtures that you can

BUY DIRECT AT LOW PRICES

Save labor—cut brooding cost. Send your name and address. Book is free. No salesman will call. Postcard will do. Address

MAXILUME, 125 W. Hubbard, Dept. 81375, Chicago 10, Ill.

KEEP YOUR DRAIN-TILE *Open*

NEW, INEXPENSIVE **FARM-ROD**

Cleans Field Tile, Septic Tank Laterals, and Other Underground Pipes

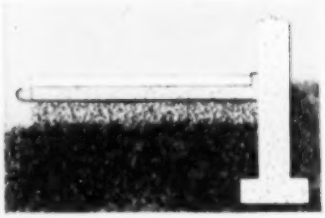
Runs by **TRACTOR TAKE-OFF** or HAND POWER

NO UNNECESSARY DIGGING. Cleans tile 3" or larger in diameter. Comes in handy, easy to use, 25-foot sections which will clean from one to several hundred feet from single opening. Remove roots, grease, mud, silt, other debris right from your tractor seat. Write for Free folder, full details.

ROTO-ROOTER CORP., Dept. S-14
801 University Ave. Des Moines, Iowa

All around the farm *A page written by our readers*

When we lay an insulated floor of vermiculite concrete, we bring this concrete up against the outside concrete wall or foundation with a plastering trowel to a thickness of ¾". This has two important advantages. The



top concrete floor will be effectively insulated from the cold outside wall, and a good expansion joint is provided to relieve temperature stresses in the floor. (See drawing.) It works well in hog houses and chicken houses.—*J. L. A., Iowa.*

Before I put straw as a mulch on my strawberries, I put it in the hen house for two or three days. The hens take the grain out of it and put some fertilizer into it.—*H. J., Missouri.*

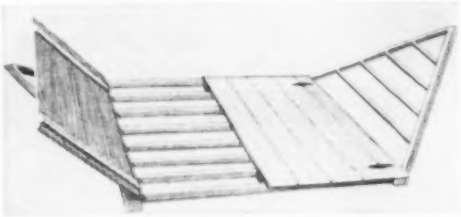
Last season when we filled our silo, we put a small load of wet straw over the top of the silage, then 4" of sawdust. We had no trouble blowing this into the silo. When we opened the silo to start feeding, we had less spoilage than ever before.—*R. W., Minnesota.*

When I need to drill a hole of a certain depth, I simply measure that depth on the drill bit, then wrap adhesive tape around the bit at that spot. This gives me a very accurate guide.—*H. A., Iowa.*

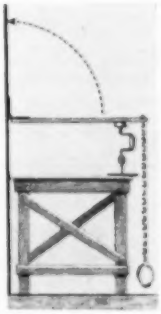
When an emery wheel or grinder gets a little uneven, I find I can true it up by running the grinder and holding against it a broken wheel. I use the rest to steady the "tool," take off high spots, and finally true the wheel.—*E. G.*

To clean out our grain drills quickly, I rigged an old cream can (as shown) so that the lid is airtight. In one side of the can a hole is cut so that a pipe or hose allows air to be taken into the vacuum formed in the can, drawing grain or seed from the drill. The vacuum is maintained by a vacuum cleaner with hose connection through the lid. The openings of the two hoses or connections inside the can are kept at least 6" apart. Seed is deposited in the can, and the cleaning of the drill can continue until completed or until the can is filled up to the opening of the intake from the vacuum line to the drill. When the can is full it can be emptied easily by shutting off the vacuum and removing the lid.—*H. L., North Dakota.*

A cattle guard is often impractical from a space viewpoint, as another gate beside it is necessary where livestock or work teams are moved in or out. I have remedied this by building a covering in two parts. Each part is hinged at the outer end so I can lift it or drop it down, as illustrated, forming a bridge which stock can cross. One-inch boards are usually satisfactory for making the two hinged coverings because they are well supported by the closely spaced rails of the guard. Cleats should be made of something which will fit between the rails of the guard in order to let the cover lie as low as possible.—*H. W., Colorado.*



To make it easier to drill metal with an ordinary brace and slow-speed drill bit, I hinged a length of 2x4 scantling to the wall above the bench. At the outer end of the 2x4 piece, extended about 10" or 12" beyond the edge of the bench, I fasten a length of light chain with a 6" ring at the lower end. A cup in the 2x4 steadies the brace. With brace in position as shown, it can be turned by hand while I put the pressure on by means of a foot in the ring. When not in use, the affair may be folded up against the wall of the shop.—*W. C. L., Jr., North Carolina.*



When nailing corrugated or channel-drain roofing, I always turn the pieces upside down, punching holes for nails. This puts the burrs on top as roofing is laid. I nail with lead-headed nails. The burrs bed into the lead, making a perfect seal. I never have had one leak.—*K. S., Ohio.*

Last fall we had many rutabagas and carrots planted and not much time to pull them, so we harvested them with a section of a spring-tooth harrow. We set the harrow deep and pulled it with the tractor. It did a job of lifting the roots just short of what a regular harvester would do.—*A. G. H., Wisconsin.*

Successful Farming will pay $5 for each item upon publication. You are invited to send us your ideas. We consider each one carefully, but regret we cannot return those not published.—*The Editors*

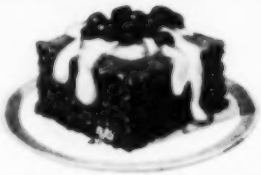
NOW
I SEE WHY
more farmers plant DEKALB than any other seed corn
YIELD How can you afford not to plant DeKalb—the seed corn that has produced an average yield of nearly 98 bushels* per acre for 41,998 farmers over a 13 year period? Consider this remarkable record when you next get seed. Get DeKalb—the corn that's planted by more farmers than any other brand.
QUALITY Farmers say, "DeKalb's the Corn that GETS RIPE." And, that's the kind of Corn YOU want. Next time, get DEKALB. You'll find one or more varieties just right for your farm . . . seed that DRIES OUT, SHELLS OUT and PAYS OUT.
DEKALB AGRICULTURAL ASSOCIATION, INC., DEKALB, ILLINOIS
Commercial Producers & Distributors of DeKalb Seed Corn and DeKalb Chix
*Yields were made by all contestants in the National DeKalb Corn Growing Contest on Selected 5-Acre Contest plots over a 13 year period.
DEKALB
The Greatest Name in Corn & Chix

Which of these wonderful BETTY CROCKER GINGERCAKE DESSERTS would your family like tonight?

EXTRA DELICIOUS... because they're made with the only GingerCake Mix that contains Softasilk Cake Flour

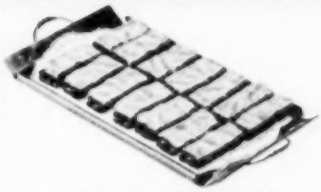
STREUSEL GINGERCAKE

Pour batter into prepared pan. Sprinkle with Streusel Topping: Mix ½ cup brown sugar (packed), 2 tbsp. Gold Medal Flour, 2 tsp. cinnamon. Blend in 2 tbsp. melted butter. Stir in ½ cup chopped nuts. Bake according to pkg. recipe. Serve hot.



CRANBERRY SPARKLE GINGERBREAD

A truly delicious combination. Squares of warm gingerbread topped with whipped cream and Cranberry Sparkle Topping: Boil for 5 minutes—1 cup water, 1 cup sugar. Add 2 cups cranberries. Boil until skins pop. Remove from heat. Cool. And enjoy!



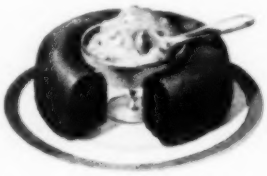
ORANGE NUT GINGER BARS

To 1 pkg. GingerCake Mix, gradually add ¾ cup lukewarm water. Mix until smooth. Stir in—1 tbsp. grated orange rind, 1 cup chopped nuts. Pour into 2 greased pans, 9x9x1¾-in. Bake 12—15 min. in moderate oven (350°). Cut in bars. Frost with orange icing.

LEMON GINGER PIE

Bake gingerbread in layers according to pkg. recipe. Spread warm layers with your favorite lemon filling. Cover top with whipped cream. Serves 8.

This Mix makes lovely, light gingerbread because Betty Crocker uses only famous Softasilk Cake Flour.



GINGERCAKE RING

Pour gingerbread batter into greased 9-in. ring mold, 1½ qt. capacity. Bake 20—25 minutes in moderate oven (350°). Fill center of ring with fruit or whipped cream.

This Betty Crocker recipe is so special—no one will ever guess you made it so easily. You add only water.

GINGERBREAD WITH LEMON SAUCE

Luscious 'n lovely. Serve squares of warm gingerbread topped with softened cream cheese and lemon sauce.

Everyone likes this tender, spicy-rich gingerbread because it's Betty Crocker's own recipe. Just add water, mix and bake it in a few minutes.

Betty Crocker

GINGERCAKE MIX

Be sure to try Betty Crocker's two other wonderful mixes . . . Betty Crocker PartyCake Mix and Betty Crocker Chocolate Devils Food Mix.